# UNIVERSITY SUPERVISION OF STUDENT TEACHERS: A COMPARISON OF TRADITIONAL AND ALTERNATIVE MODELS

By

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TABLE OF CONTENTS

ABSTRACT ..... vi

CHAPTERS

1 INTRODUCTION ..... 1

Historical Perspective of Field Experiences in Teacher Education ..... 1
The Role of Field-Based Learning Experiences in Teacher Education: Contemporary Criticisms ..... 2
Lack of Empirical Validation ..... 2
Questionable Benefits ..... 3
Research Findings on Field-Based Experience ..... 4
Identification of Common Issues ..... 4
Context of Field-Based Experiences ..... 4
Individuals within the Student Teaching Relationship ..... 7
Conclusions and Implications ..... 9
Statement of the Problem ..... 10
Rationale for the Study ..... 12
Definition of Terms ..... 13
Delimitations of the Study ..... 14
Limitations of the Study ..... 15
Summary ..... 16

2 REVIEW OF THE LITERATURE ..... 17

Selection of Relevant Literature ..... 17
Theories of Learning in Adulthood ..... 18
Behaviorist Theory ..... 19
Cognitivist Theory ..... 20
Humanist Theory ..... 25
Constructivist Theory ..... 27
Social Learning Theory ..... 29
Mentoring ..... 36

Research on Supervisory Effectiveness ..... 39
Studies Investigating Benefits of Effective University Supervision ..... 39
Studies Investigating Barriers to Effective University Supervision ..... 44
Research on Sources of Influence on Student Teachers ..... 49
Reconceptualized Models of Student Teacher Supervision ..... 56
Historical Perspective ..... 56
Studies of Reconceptualized Roles for University Supervisors ..... 56
Studies of Reconceptualized Roles for Cooperating Teachers ..... 59
Professional Development School Model ..... 64
Summary ..... 71
Study Characteristics ..... 71
Research Methodology ..... 71
Research Trends ..... 73
Research Themes ..... 73
Conclusions and Implications of Research Findings ..... 79

3 METHODOLOGY ..... 81

Subjects ..... 81
Interns ..... 81
Cooperating Teachers ..... 82
University Supervisors ..... 82
Settings ..... 87
Research Design ..... 87
Informed Consent ..... 89
Models of Student Teacher Supervision ..... 91
Protocol for Supervision of Student Teachers ..... 94
Research Component I: Quantitative Comparison of Student Teaching Performance ..... 101
Research Component II: Qualitative Analysis of Interviews ..... 103
Summary ..... 107

4 RESULTS ..... 109

Research Component I: Quantitative Comparison of Student Teaching Performance ..... 109
Seatwork Management ..... 110
Mean Scores ..... 111
Repeated Measures Analysis of Variance ..... 112

Instructional Management and Lesson Preparation ..... 112
Mean Scores ..... 113
Repeated Measures Analysis of Variance ..... 113
Time Management ..... 114
Mean Scores ..... 114
Repeated Measures Analysis of Variance ..... 115
Classroom Management ..... 116
Mean Scores ..... 117
Repeated Measures Analysis of Variance ..... 117
Summary of Mean Scores for Treatment Groups ..... 118
Summary of Inferential Statistics ..... 118
Research Component II: Qualitative Analysis of Interviews ..... 119
Traditional Model ..... 120
Benefits and Advantages of Traditional Model ..... 121
Disadvantages and Drawbacks of Traditional Model ..... 123
Summary of Advantages and Disadvantages of the Traditional Model ..... 125
Alternative Model ..... 126
Benefits and Advantages of the Alternative Model ..... 126
Disadvantages and Drawbacks of the Alternative Method ..... 128
Summary of Advantages and Disadvantages of the Alternative Model ..... 130
Summary of Advantages and Disadvantages of Models ..... 131
Emerging Themes ..... 131
Conflict ..... 137
Preference, Selection, and Matching ..... 139
Things Missed or Lost ..... 141
Summary of Emerging Themes ..... 142

5 CONCLUSIONS AND DISCUSSION ..... 143

Significance of Findings ..... 143
Summary of Quantitative and Qualitative Findings ..... 144
Interpretation of Statistical Results ..... 146
Interpretation of Group Mean Scores ..... 146
Interpretation of Inferential Statistics ..... 148
Implications for Supervisory Practices ..... 149
Benefits of Traditional Models of Supervision ..... 149
Benefits of Alternative Models of Supervision ..... 150
Considerations ..... 152
Issues and Concerns ..... 154

Recommendations ..... 155
Selection and Matching ..... 155
Training and Evaluation ..... 156
Protocol ..... 157
Summary Statements ..... 158
Implications for Further Research ..... 159

APPENDICES

A TEACHING EFFECTIVENESS RATING SCALES: CONSTRUCT VALIDATION LITERATURE REVIEW ..... 162

B RATING SCALES FOR STUDENT TEACHER PERFORMANCE ..... 174

C RESEARCH QUESTIONS: UNDERLYING ASSUMPTIONS, SUPPORTING LITERATURE, AND INDICATORS ..... 185

D INTERVIEW PROTOCOLS ..... 209

E DEMOGRAPHIC INFORMATION FORMS ..... 232

F INFORMED CONSENT ..... 238

G QUALITATIVE ANALYSIS OF INTERVIEWS: DOMAINS AND THEMES ..... 244

REFERENCES ..... 252

BIOGRAPHICAL SKETCH ..... 258

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UNIVERSITY SUPERVISION OF STUDENT TEACHERS:
A COMPARISON OF TRADITIONAL AND ALTERNATIVE MODELS

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This study compared student teaching outcomes for interns who received traditional university supervision with interns who received alternative student teaching supervision during their semester of full-time student teaching at the University of Florida. Following assignment of student teaching placements, 33 interns were stratified on two levels and then randomly assigned to treatment groups. In the traditional model, university supervisors assumed primary responsibility for supervision of interns. In the alternative model, cooperating teachers assumed primary supervisory responsibility.

Two research methodologies were employed to compare student teaching outcomes. A repeated measures analysis of variance (ANOVA) was used to determine if there was any significant difference between treatment groups on rate of progress over time. Independent ANOVAs were computed for measures of classroom management, time management, instructional management and lesson presentation, and seatwork management competencies. Statistical

analysis revealed no significant differences between treatment groups. On all four domains, interns who received alternative student teaching supervision progressed at about the same rate as interns who received traditional university supervision.

To better understand the benefits and disadvantages associated with traditional and alternative models, interviews were conducted at the end of the semester with interns, cooperating teachers, and university supervisors from each treatment group. Time demand was identified by all participants as the primary disadvantage in both models. Participants in the traditional model identified university perspective and shared administrative duties as the primary advantages of university supervision. Participants in the alternative model identified flexibility and preference for dyadic arrangements as the primary advantages of alternative supervision.

Findings of this study suggest that traditional and alternative models of student teacher supervision can be equally effective. Three considerations emerged as being essential to successful implementation of alternative models of supervision: participant selection and matching, training and evaluation, and a comprehensive evaluation protocol.

# CHAPTER 1
# INTRODUCTION

## Historical Perspective of Field Experiences in Teacher Education

Student teaching has been an integral, essential, and established aspect of teacher education since 1439, when William Byngham established the first teacher education school, Godshouse College, in England (Morris, 1974). In this country, normal schools and demonstration schools within teachers' colleges played an important role in teacher preparation from the turn of the century until the 1950s (Emans, 1983). Unlike today's public school teachers, teachers in normal and demonstration schools typically taught children in the classroom, supervised student teachers, and usually taught some of the college methods courses as well. This arrangement created a strong link between theory and classroom practice. However, normal and demonstration schools were largely discontinued in the decade following World War II, due to growing resources in the post-war years and increasing numbers of colleges and universities offering teacher preparation programs. As student teaching was moved into local schools, classroom teachers were increasingly given responsibility for supervision of student teachers (Emans, 1983).

Field-based experience (i.e., student teaching) continues to be considered a major, highly valued component of teacher education (Boydell, 1986; Metcalf, 1991), presently included in every accredited teacher education program (Buck, Morsink, Griffin, Hines, & Lenk, 1992). As the cornerstone of teacher education (Johnson, 1986; Monson & Bebb, 1970; Ratzlaff & Grimmett, 1985; Warger & Aldinger, 1984; Zeichner, 1980), student teaching is often

viewed by program graduates, professional teacher organizations, and policymakers as the most important learning experience of professional preparation (Buck et al., 1992; Zahorik, 1988). It provides real life experience in which student teachers are able to explore teaching methods and styles (Beyer, 1984), to link theory with practice (Diamonti, 1977), to become familiar with the demands of teaching, and to develop and demonstrate the skills and values necessary to become an effective teacher (Beyer, 1984). It provides the first real opportunity to think as a teacher, to inquire actively rather than passively, and to connect general knowledge with particular cases. Student teaching culminates a student's preparation to be a teacher (Krutilla & Safford, 1990).

## The Role of Field-Based Learning Experiences in Teacher Education: Contemporary Criticisms

### Lack of Empirical Validation

As the student teaching experience has become an almost universally accepted component of teacher education programs (Beyer, 1984; Metcalf, 1991), generally assumed by teachers, teacher educators, student teachers, and lay people to be both beneficial and necessary (Emans, 1983; Johnson, 1986), there has been increasing pressure for teacher education programs to place greater emphasis on student teaching experiences (Johnson, 1986; Metcalf, 1991). Yet, amid all the debate regarding the best way to prepare teachers (e.g., Carnegie Task Force, 1986; Holmes Group Report, 1986), the role of field-based experiences has, until recently, escaped the attacks of critics (Johnson, 1986; Zeichner, 1980). The student teaching experience has been described as "the largest unvalidated segment of professional education programs" (Johnson, 1986, p. 90). As Griffin, Hughes, Defino, and Barnes (1981) pointed out, some research has focused on isolated aspects of student

teaching, yet little systematic investigation has been undertaken (Johnson, 1986), and few attempts have been made to synthesize and critique research on student teaching in an effort to identify major findings and raise further questions (Griffin et al., 1981). Underlying the move toward increased emphasis on field-based experiences is the assumption that these experiences produce better teachers. That seemingly reasonable assumption, however, is not supported by empirical data (Johnson, 1986).

Questionable Benefits

Teacher educators have raised concerns about the continuation of current practices in student teaching (Emans, 1983; Zahorik, 1988; Zeichner, 1980), cautioning that field-based experiences can have undesirable as well as desirable outcomes (Richardson-Koehler, 1988). McIntyre (1983) described field experiences as "probably the most praised, most criticized, most entrenched, most debated but certainly least understood part of preservice teacher education" (p. 2). As Zeichner (1980) pointed out, the literature on field-based experiences clearly does not support the contention that the practice is necessarily beneficial. "It is naive to think that we now know all there is to know about field-based experiences, but from the little that we do know, there are definitely decrements indicated by the attitudes, behaviors, and perspectives of student teachers" (p. 51). The benefits of field-based experiences have not been documented by systematic, longitudinal research. Published studies of student teaching practices are scarce, tend to be idiosyncratic, and offer minimal long-term evaluative information. Further, program descriptions reported more than 2 or 3 years previously may no longer be accurate (Buck et al., 1992). Zeichner summed up the situation by stating,

> There have been literally hundreds of studies conducted on preservice field-based experiences. One would think that there would be plenty of data from which to draw in formulating policies with regard to these

> experiences. Unfortunately, this is not the case. There is a great deal of confusion and contradiction surrounding the data which do exist. (p. 46)

While the body of knowledge about the benefits of field-based experience is growing, research findings are inconsistent, and the relative merits of student teaching remain unclear (Metcalf, 1991).

## Research Findings on Field-Based Experience

### Identification of Common Issues

Commonly expressed concerns about the role of field-based experiences in teacher education programs and the questionable outcomes of those experiences tend to fall into two broad categories: (a) the context of field experiences and (b) individuals within the student teaching relationship. Discussion of problems inherent in the student teaching context center around school culture, school-university conflict, and the structure of field experiences in teacher education programs. Widespread concerns about individuals within the student teaching experience (i.e., cooperating teachers, university supervisors, and student teachers) focus on their influence, roles, and interpersonal relationships.

### Context of Field-Based Experiences

Socialization into school culture. Numerous educators have expressed concern that immersion in prolonged field experiences will perpetuate socialization of prospective teachers into established patterns of school practices (Beyer, 1984; McIntyre, 1983; Pugach, 1992; Zahorik, 1988; Zeichner, 1980) and promote development of meanings, values, and commitments compatible with utilitarian teaching perspectives (Beyer, 1984). Thrust into the existing school culture without the professional status of paid teachers, student teachers "may tend to accept existing conditions, patterns, and relationships as forming the boundaries beyond which one need not, or should not, trespass"

(Beyer, 1984, p. 36). It appears to be the accepted norm of the teaching profession that one learns to teach through the experience of teaching. However, because cooperating teachers are more oriented toward the practical and particular rather than toward theory and generalizations, student teachers may not learn the more general principles that would allow them to adjust to various teaching situations (Richardson-Koehler, 1988). The tendency to accept what others regard as appropriate or commendable fosters an acceptance of the status-quo as natural, correct, or essential. As Beyer cautioned,

> In mandating field experiences for our students which have the potential effect of replicating current practice, we may be assisting in the process of ideological maintenance and cultural reproduction. In addition to being potentially miseducative, the field experiences which promote utilitarian perspectives, replication of "successful" teaching practice, and uncritical acceptance of the educational status quo also may serve to further the ideological nature of school practices and processes. (pp. 37-38)

School-university conflict. The opposing forces of schools and universities create conflicts within the structure of field-based experiences, often to such an extent that what student teachers actually learn sometimes runs contrary to the expressed intentions of both the schools and the universities. Constraints imposed by the material conditions of the classroom and school bureaucracies pressure student teachers toward the existing, conservative views of teaching (Zeichner, 1980). Student teachers' failure to transfer skills taught in university coursework to the teaching arena is a persistent problem (Peterson & Hudson, 1989). Teacher educators are confronted by lack of university support for costly and time-consuming supervision of student teachers (Buck et al., 1992). Given the lack of commitment from higher education, the low status of supervising faculty, lack of objective evaluation criteria, loss of control to teacher unions and state legislatures, and the lack of

connection between university coursework and field experiences (McIntyre, 1983), it appears that most university faculty members cannot become significantly involved in field-based experiences, even if they wish to do so (Buck et al., 1992).

Structure of field-based experiences. The existing structure of field-based experiences presents constraints for teacher educators who expect classroom placements to provide real-life experiences for prospective teachers (Warger & Aldinger, 1984). It appears that traditionally structured field experiences have evolved from early apprenticeship programs without examination of their theoretical basis, purpose, nature, or length (McIntyre, 1983). Buck et al. (1992) have identified four unresolved issues arising from implementation of traditionally structured field experiences: (a) the selection of classroom settings and cooperating teachers, (b) the length of internship, (c) the amount of supervision, and (d) the role of early field experiences.

Because student teachers appear to be most strongly influenced by cooperating teachers (Metcalf, 1991; Richardson-Koehler, 1988) and often adopt existing classroom practices and teacher beliefs (Zeichner, 1980; Zeichner & Tabachnick, 1981), the selection of cooperating teachers and classroom settings seems particularly important. Yet, universities typically have little control over the selection and qualifications of cooperating teachers or the classroom settings in which student teachers are placed (Emans, 1983).

Teacher educators frequently advocate extending the length of field experiences, citing increased opportunities to improve and refine instructional competencies and added opportunity for collaborative activities. However, critics question the value of extending any teacher education program component that has not been shown empirically to produce better teachers.

The amount of student teacher supervision continues to be an unresolved issue in student teaching practices, since the actual effect of intensive supervision on student teacher behavior remains unknown (Buck et al., 1992). Warger and Aldinger (1984) cited three concerns about provision of student teacher supervision: the ambiguous purpose of supervision, the context in which supervision occurs, and the lack of university support for supervision of student teachers.

Individuals within the Student Teaching Relationship

Sources of influence. Much has been written about the influence of cooperating teachers and university supervisors on student teachers during field-based experiences, but findings are inconsistent and inconclusive. While results of some studies have suggested that university supervisors have at least as much, if not more, influence on student teachers as cooperating teachers do, findings of other studies indicate that cooperating teachers have stronger influence over student teachers, even to the extent of negating what student teachers have learned from university coursework (Emans, 1983). As Metcalf (1991) stated,

> Research evidence regarding the effects of supervision by the cooperating teacher . . . is conflicting. Although student teachers feel strongly that the cooperating teacher is most influential in the student teaching experience, it appears that this influence may be inconsistent. When the effects of supervision by the cooperating teacher . . . have been studied directly, mixed results have been obtained. . . . Research data regarding the influence of university supervisors on the student teachers they oversee are minimal. And, like research of supervision by cooperating teachers, such research has produced mostly inconclusive results. A recurrent finding is that student teachers do not perceive that their university supervisors affect them as greatly as their cooperating teachers do. (p. 32)

Roles of student teaching participants. The roles of the university supervisor and cooperating teacher are ambiguous and, at times, overlapping (Richardson-Koehler, 1988). Because it is widely accepted that cooperating

teachers play a major role in field experiences (Metcalf, 1991; Richardson-Koehler, 1988), careful consideration must be given to the selection, training, and evaluation of cooperating teachers (Buck et al., 1992).

Likewise, Metcalf (1991) advocated formal training to prepare university supervisors for their role. In examining the role of university supervisors, Metcalf concluded that (a) cooperating teachers do not find value in university supervision, (b) student teachers tend to imitate the practices of cooperating teachers, regardless of approval or disapproval of their university supervisor, and (c) university supervision has no effect on student teaching practice. In addition, Buck et al. (1992) concluded from a review of current literature that the relative merits of intensive supervision and follow-up on actual student teaching practices remain unknown. Despite these grim conclusions, Metcalf pointed out that the university supervisor may play a critical role in administrative, managerial, and interpersonal dimensions of field experiences.

Little has been written about the role of student teachers in field experiences. Zeichner (1980) and McIntyre and Morris (1980) stressed the need to examine how student teachers are shaped by and, in turn, shape the institutions in which they work. Thrust into the existing school culture, student teachers demonstrate a tendency to accept what others regard as appropriate or commendable, leading to an acceptance of current situations and practices as natural, correct, essentially unalterable, and beyond criticism (Beyer, 1984).

Interpersonal relationships. The outcomes of field-based experiences are often dependent on interpersonal relationships within the student teaching triad (Marrou, 1989). In fact, Zimpher, deVoss, and Nott (1980) stressed the need to study field-based experiences "until the interrelationships among participants are delimited and understood within the context of the total experience" (p. 11). Although research on naturally occurring groups has

consistently suggested that adults prefer the psychological intimacy of pairs (Boydell, 1986; Emans, 1983; Yee, 1968), field experiences typically depend on the cooperation of three individuals within the student teaching triad (i.e., cooperating teacher, university supervisor, and student teacher). Prior to the student teaching experience, participating triad members may have been virtual strangers, differing in backgrounds, perspectives, and expectations (Boydell, 1986). Emans (1983) pointed out that the inclusion of a university supervisor unwittingly creates a threesome, potentially weakening the very experience educators intend to strengthen. As Yee (1968) found, the student teaching triad appears to seek greater dyadic balance at the cost of decreased triadic cohesiveness, resulting in triadic relationships that more often resemble competitive rather than cooperative situations. Yee (1968) concluded that the reason student teaching triads tend to shift toward negative relationships and competitive situations may be that typical field experiences provide little opportunity and purpose for meaningful relationships between student teachers, cooperating teachers, and university supervisors.

Conclusions and Implications

Although it is difficult to draw any clear conclusions from the research on the benefits of field-based experiences, two implications emerge from the existing data. First, it is evident that field-based experiences are neither completely beneficial, as the abundant testimonials and increased emphasis on field experiences would suggest; nor are they merely vehicles for socializing new personnel into existing school patterns, as many critics maintain (Zeichner, 1980). Second, it appears that field-based experiences, often espoused as the most powerful aspect of teacher education, enabling student teachers to put it all together under the direction and guidance of significant others, may promise more than they can deliver (Grimmett & Ratzlaff, 1986).

## Statement of the Problem

The problem investigated in this study was the comparison of student teaching outcomes for interns who received traditional university supervision with interns who received alternative student teaching supervision during their semester of full-time student teaching. Four hypotheses about student teaching performance were statistically tested, and 12 research questions were investigated through the use of interviews.

The following null hypotheses were tested:

$H_1$: There will be no significant differences between scores on measures of seatwork management for interns who received traditional university supervision and those who received alternative student teaching supervision.

$H_2$: There will be no significant differences between scores on measures of instructional management and lesson presentation for interns who received traditional university supervision and those who received alternative student teaching supervision.

$H_3$: There will be no significant differences between scores on measures of time management for interns who received traditional university supervision and those who received alternative student teaching supervision.

$H_4$: There will be no significant differences between scores on measures of classroom management for interns who received traditional university supervision and those who received alternative student teaching supervision.

The following research questions were investigated:

#1. What do cooperating teachers who participated in the traditional model of intern supervision cite as the benefits or advantages of having a university supervisor directly involved?

#2. What do cooperating teachers who participated in the traditional model of intern supervision cite as the disadvantages or drawbacks of having a university supervisor directly involved?

#3. What do cooperating teachers who participated in the alternative model of intern supervision cite as the benefits or advantages of assuming primary responsibility for intern supervision, rather than having a university supervisor directly involved?

#4. What do cooperating teachers who participated in the alternative model of intern supervision cite as the disadvantages or drawbacks of assuming primary responsibility for intern supervision, rather than having a university supervisor directly involved?

#5. What do interns who received traditional supervision cite as the benefits or advantages of having a university supervisor directly involved?

#6. What do interns who received traditional supervision cite as the disadvantages or drawbacks of having a university supervisor directly involved?

#7. What do interns whose cooperating teacher assumed primary responsibility for supervision cite as the benefits or advantages of not having a university supervisor directly involved?

#8. What do interns whose cooperating teacher assumed primary responsibility for supervision cite as the disadvantages or drawbacks of not having a university supervisor directly involved?

#9. What do university supervisors who participated in the traditional model of intern supervision consider to be the strengths of their role?

#10. What do university supervisors who participated in the traditional model of intern supervision consider to be the limitations of their role?

#11. What do university supervisors who participated in the alternative model of intern supervision consider to be the strengths of their role?

#12. What do university supervisors who participated in the alternative model of intern supervision consider to be the limitations of their role?

## Rationale of the Study

As universities strive to keep pace with growing demands for special education teachers and respond to pressures for increased emphasis on field-based experiences, teacher educators must examine new ways to accommodate increased numbers of preservice students. Justifications for reconsidering traditional models of university supervision are abundant. Traditional models of student teacher supervision (a) are labor-intensive, requiring considerable faculty time, (b) prove to be costly, (c) are generally unsupported and unrewarded by higher education administration, (d) tend to be ambiguous in purpose, (e) lack clearly defined roles for members of the student teaching triad, (f) provide little control over both desired and undesired sources of influence, (g) are of questionable benefit, and (h) lack empirical validation. Therefore, it is appropriate for teacher educators to consider alternative models of student teacher supervision.

Research on alternative models of student teacher supervision is scarce. Twenty-five years have passed since Morris (1974) investigated the effects of eliminating the role of the university supervisor and reported finding no differences in teaching performance or adjustment between groups of student teachers who were and were not supervised by a university faculty member. No

follow-up studies have been reported. Given the significant and positive findings of Morris' study, the lack of empirical validation for traditional models of student teacher supervision currently in use, and the need for teacher education programs to find ways to accommodate increasing numbers of preservice students, it would appear that follow-up investigation is both warranted and timely.

## Definition of Terms

Because confusion and misinterpretation can result when terms are used ambiguously or in different ways, the following terms are defined as they are used in this study.

A cooperating teacher is a public school teacher who works in cooperation with the university to provide supervised classroom teaching practice for students in a university teacher education program. A cooperating teacher is directly responsible for a student teacher's professional growth and experience on a daily basis. Cooperating teachers are sometimes referred to as directing teachers (McIntyre, 1983).

Field-based experience refers to classroom teaching practice and applies to practicum (i.e., pre-internship), internship, or student teaching experiences (Johnson, 1987).

In this study, an intern refers to a special education graduate student who is participating in full-time student teaching.

Internship, as used in this study, refers to the semester of full-time, graduate-level student teaching.

Practicum, as used in this study, refers to part-time, undergraduate-level student teaching. The term pre-internship is used synonymously.

Student teaching, as used in this study, refers to classroom teaching practice (i.e., field-based experience), either at the graduate or undergraduate

level. Student teaching may be used variously by researchers to refer to practicum, pre-internship, or internship experiences (Johnson, 1987).

Student teaching dyad refers to any pair formed between members of the student teaching triad (i.e., intern-university supervisor, intern-cooperating teacher, or university supervisor-cooperating teacher) (Yee, 1968).

A student teaching triad consists of intern, cooperating teacher, and university supervisor (Yee, 1968).

The university supervisor is a faculty member or doctoral student who is responsible for evaluating a student teacher's performance, for ensuring that university policies are followed and requirements are met, and for providing a link between the university and the public school (McIntyre, 1983).

## Delimitations of the Study

The scope of this study was delimited in several ways. First, the study was geographically restricted to north central Florida. Caution should be used when generalizing results of this study to other geographical regions.

Second, this study was limited to PROTEACH interns and university supervisors from the Department of Special Education at the University of Florida and special education teachers from nearby public schools who voluntarily participated in the PROTEACH program as cooperating teachers. The Special Education PROTEACH program is a 3-year teacher education program leading to the Master of Education (M. Ed.) and certification in two areas of specialization. PROTEACH students complete two practica during their senior year and a semester of internship during their master's program. Differences may exist across universities, departments of education, and levels of experience for student teachers.

Finally, this study is delimited by the size of the special education intern cohort for Fall semester 1994. Data are available only for 17 interns who

received traditional university supervision, 16 interns who received alternative student teacher supervision, 33 cooperating teachers, and 9 university supervisors. Generalization of these results to other groups of interns, cooperating teachers, and university supervisors should be considered with caution.

## Limitations of the Study

The results of this study were limited by several factors. First, the study was conducted with graduate-level interns who already had completed two undergraduate practica experiences. Caution should be used when generalizing the results of this study to student teachers with different background experiences.

Second, in this study, cooperating teachers who met University of Florida criteria for supervising student teachers were recruited by the Department of Special Education, but participation in the PROTEACH program was on a voluntary basis.

Third, because of the nature of special education teacher certification in the state of Florida, cooperating teachers in this study had varying educational backgrounds and held different areas of certification.

Fourth, because Florida classifies and places students with special needs according to categories of disability (e.g., learning disabilities, mental handicaps, physical handicaps, emotional handicaps, hearing-impaired, varying exceptionalities), there was variation in classroom settings (e.g., resource room, self-contained classroom).

Fifth, both cooperating teachers and university supervisors differed in supervisory experience and skills. Because individual differences and personal attributes of both cooperating teachers and university supervisors are known to

affect student teaching outcomes, consideration should be exercised when interpreting findings of this study.

Finally, in this study, some, but not all, aspects of the supervisory protocol were modified for alternative treatment. On the one hand, these changes created significant differences between treatment groups. On the other hand, the closeness of models in some areas may have created potentially confounding factors.

## Summary

Examination of alternative models of student teacher supervision is needed. The problem investigated in this study was the comparison of student teaching outcomes for interns who received traditional university supervision with interns who received alternative student teaching supervision during their semester of full-time teaching. The importance of this study is underscored by the current lack of empirically validated models of student teacher supervision and the need for teacher education programs to keep pace with growing demands for special education teachers.

A review and analysis of the literature relevant to this topic are presented in Chapter 2. Methodology for the study is described in Chapter 3. The results are presented and analyzed in Chapter 4. Implications and conclusions drawn from the results are discussed, and recommendations for future research are made in Chapter 5.

# CHAPTER 2
# REVIEW OF THE LITERATURE

In Chapter 2, a review and analysis of professional literature relevant to university supervisory practices are presented. The chapter is organized into seven sections. First, criteria for selecting relevant literature are described. Next, major theories of adult learning are presented. In the third section, the benefits of and barriers to effective supervisory practices are discussed. In the fourth section, the roles of cooperating teachers and university supervisors are examined as possible sources of influence on student teachers. In the fifth section, studies of reconceptualized and restructured supervisory practices are presented. In the following section, the Professional Development School model is presented. In the final section, findings in the literature are summarized, and implications for further study are discussed.

## Selection of Relevant Literature

The first, and perhaps most critical, aspect of the literature search was determining and delimiting a body of literature to be reviewed. The following sources were consulted for the years since 1963: Educational Resources Information Center (ERIC), Resources in Education (RIE), Current Index to Journals in Education (CIJE), Psychological Abstracts, and Dissertation Abstracts International. In addition, any relevant publications cited in the literature prior to 1973 were considered. Due to the paucity of current empirical

research on supervisory practices of student teaching, publications other than studies were included if they were deemed informative.

The following descriptors and combinations of descriptors were used in the literature search: (a) influence, supervisor, and student teacher(s)(ing), which yielded 20 citations; (b) influence and supervisor(s), 110 citations; (c) influence and cooperating teacher, 29 citations; (d) style and supervision, 115 citations; (e) supervisor qualifications, 90 citations; (f) supervisory method, 28 citations; (g) supervisory conference, 1 citation; (h) supervisor role, 3 citations; (i) supervisory method and clinical supervision of teachers, 5 citations; (j) supervisor-subordinate relationships, 27 citations; (k) supervisor-supervisee relationships, 24 citations; (l) perceptions and student teachers, 36 citations; and (m) clinical supervision of teachers, 35 citations.

Although the search yielded 523 citations, only 38 were determined to be relevant. Numerous factors contributed to the decision to exclude citations. Across the searches by different descriptors, 15 citations were duplicated. The greatest contributing factor, however, was the inclusion of business and agricultural education in the database. In addition, the term "supervisor" was very broadly defined. After eliminating duplications, excluding publications unrelated to teacher education, and narrowly defining "supervisors" as university supervisors of student teachers, 38 citations remained.

## Theories of Learning in Adulthood

Most definitions of learning have in common the concepts of behavioral change and experience (Merriam & Caffarella, 1991). These definitions generally imply that learners must perform in order for learning to occur and that all human behavior is learned. However, definitions based on the notion of

behavioral changes ignore complexities, such as whether observational learning is possible.

Learning theories focus on what occurs when learning takes place, rather than focusing on learning as an end product (Merriam & Caffarella, 1991). There are numerous learning theories, varying both in complexity and assumptions about learning. Learning theories also vary considerably in their underlying assumptions. Although there is little consensus on the number of learning theories or how to group them, learning theories can be organized according to their orientation. These basic orientations offer differing assumptions about learning and provide insights into adult learning. Merriam and Caffarella (1999) identified five orientations to learning: behaviorist, cognitivist, humanist, constructivist, and social learning.

Behaviorist Theory

Behaviorism emerged early in the 20th century, led by John Watson. Among others, Thorndike, Pavlov, Tolman, Guthrie, Hull, and Skinner made significant contributions to behaviorist theories (Merriam & Caffarella, 1999). Behaviorist theories have provided foundation for educational practice, but Skinner in particular applied behavioral learning theory to educational issues.

Three basic assumptions underlie behaviorism. First, learning manifests as observable change in behavior rather than as internal thought process. Second, learning is determined by the environment, not by the individual learner. Third, the learning process is dependent on reinforcement and contiguity (how close in time two events must be for a bond to be formed).

By the 1960s, Skinner had systematized the principles and concepts of behavior analysis, including reinforcement, extinction, generalization, and

chaining (Poling & Fuqua, 1986). It was Skinner's theory of operant conditioning in particular that applied reinforcement to learning theory (Merriam & Caffarella, 1999). In essence, operant conditioning holds that behaviors rewarded or reinforced are likely to become more frequent under similar conditions, while behaviors that are ignored are likely to become less frequent. Applied to instructional practice, behavioral learning theory has led to systematic instructional design, behavioral objectives, teacher accountability, programmed instruction, computer-assisted instruction, competency-based instruction, task-analysis, and chaining. Behaviorism has had significant impact on both instructional practice and understanding of learning theory.

Cognitivist Theory

As interest in behaviorism peaked during the 1950s and 1960s, Gestalt psychologists began criticizing behaviorists as being too concerned with the particular, too focused on isolated events and actions, and too reliant on observable behavior to define the learning process (Merriam & Caffarella, 1999). Gestaltists were concerned with the whole rather than parts and with patterns of behavior rather than isolated events. Gestalt views gave rise to cognitive learning theory.

Cognitive learning theory hinges on perception, insight, and meaning (Merriam & Caffarella, 1999). Gestaltists such as Wertheimer, Kohler, Koffka, and Lewin proposed that learning requires one to reorganize experiences in order to make sense of environmental stimuli. When a learner is presented with a problem, he considers all the factors necessary to solve the problem and then cognitively arranges and rearranges the possibilities until he arrives at a solution. This solution often comes suddenly as an insight. Thus, problems

exist in one of two states: solved or unsolved. There is no state of partial solution in the interim. In this sense, learning is a cognitive phenomenon.

A major distinction between behaviorist and cognitive theory is the locus of control over learning activity (Merriam & Caffarella, 1999). While behaviorists place locus of control in the learning environment, cognitivists place locus of control within the individual learner's thought process. Thus, with the shift to cognitive orientation, learning theorists began to focus on individual learners and, in particular, on their cognitive processes.

By the mid-1960s, Piaget emerged as a leading cognitivist. However, influenced by both behavioral and cognitive principles, Piaget blended the two theories. He theorized that one's internal cognitive structures are influenced by both maturational development of the nervous system and by cumulative environmental interactions and increased experiences (Merriam & Caffarella, 1999). Although Piaget's four invariant stages of cognitive development focused entirely on children, his work provided foundation for examining cognitive development in adults. His understanding that active learners construct their own knowledge, and the resulting implication that active learning is more effective than passive learning, was a significant contribution to adult learning theory. In addition, his work on emergence of formal operations provided a concept of mature adult thought.

An outgrowth of cognitive learning theories has been an interest in instructional theories (Merriam & Caffarella, 1999). Bruner, Ausubel, and Gagne, for instance, addressed the contexts of meaningful learning, and the link between acquisition and processing of information and effective instruction. Gagne's contribution to the learning-how-to-learn concept generated new

interest in cognitive development in adult learners. As Brandt, Farmer, and Buckmaster (1993) pointed out, adult learners encounter learning situations that require new ways of thinking and new approaches to problem solving. In response, adult educators must draw from cognitive learning theory to address novel learning situations. One such approach is cognitive apprenticeship.

Cognitive apprenticeship is an instructional method for teaching an acceptable way of understanding and performing tasks, solving problems, and dealing with problematic situations (Brandt et al., 1993).

> Cognitive apprenticeship is a vehicle for tapping the knowledge and experience of adults who have found ways to effectively handle the tasks, problems, and problematic situations in the current era. It may be difficult and potentially dangerous for learners to try to figure out what to do independently; cognitive apprenticeship can also help them avoid reinventing the wheel. (p. 69)

Adult learning environments often present challenges and dilemmas. For example, there may be no acceptable level or low tolerance level for error or risk while learning to perform a skill. In some situations, learners must be able to perform a skill before encountering it in the real world, or the learner may have failed to successfully acquire an essential skill through other teaching methods. Under any or all of these conditions, cognitive apprenticeship is especially relevant. Cognitive apprenticeship is appropriate in situations in which an experienced adult is able to successfully model the target task in real life. Learners can be provided with guided practice and coaching under protected conditions.

Brandt et al. (1993) outlined five phases in the cognitive apprenticeship model: modeling, approximating, fading, self-directed learning, and generalization. In each phase, there are distinct roles for mentors and learners.

Phase I, modeling, is the crux of cognitive apprenticeship. The goal is to provide adult learners with modeling of a skill that must be performed acceptably in the real world. It is essential that modeling be performed by an experienced mentor. This phase combines behavioral and cognitive aspects of modeling. The mentor provides behavioral modeling by demonstrating the real-life skill and provides cognitive modeling by articulating the essence of his thinking during performance of the skill. In order for the learner to develop a cognitive model of the real-life skill, it is important to observe the totality of the skill, not merely the individual steps.

In Phase II, approximating, the learner approximates the target skill by performing the task and articulating his thoughts. There are three levels of articulation. Prior to performing the skill, the learner articulates what he plans to do and why. During the activity, the learner talks about the process (unless this interferes with the activity). Following the activity, the learner reflects on the difference between his performance and the mentor's performance. As the learner articulates his thinking at each step, the mentor is able to monitor the learner's intended performance and intervene when appropriate. Throughout the process of reflection and articulation, the learner develops self-monitoring and self-correcting skills.

During the approximation phase, the mentor provides scaffolding to minimize risks and provide appropriate support. In scaffolding, the mentor physically and/or verbally provides assistance with difficult skill components. Scaffolding permits the learner to approximate performing the real-life skill as much as possible while minimizing risks and avoiding errors. The mentor

coaches the learner, providing feedback about performance, offering suggestions for improvement, and intervening when remediation is necessary.

In Phase III, fading, learners continue to approximate successful skill performance, either individually or in groups. As learners demonstrate increased skill competency, mentors decrease coaching and scaffolding activity. The fading process continues as learners operate in increasingly complex, risky, or ill-defined situations.

Phase IV, self-directed learning, occurs when learners have completed a series of successful approximations and are able to perform the target skill satisfactorily. The process becomes internalized as the learner practices performing the skill on his own, in his own way, and within specified limits acceptable to the profession and society. Assistance is provided by the mentor only at the learner's request.

The final phase, generalizing, helps ensure that the learner will apply the newly acquired skill to other similar tasks and problems. During this phase, the mentor and learner discuss the generalizability of what has been learned to subsequent learning. Without the final phase of generalization, cognitive apprenticeship, with its emphasis on learning how to understand and deal acceptably with a particular type of task, problem, or situation, would be limiting (Brandt et al., 1993).

> Cognitive apprenticeship derives its power from knowledgeable, proficient people showing learners how to do something and stating aloud what they are thinking while doing the activity. They present the task in a realistic context. The key is that what is shown and explained is the real thing, combining the what, how, when, and why. It is the main method used to teach people how to perform tasks that contain elements of basic physical (or motor) skills, thinking (cognitive) skills, problem-solving skills, or integrative skills. . . . The key to cognitive apprenticeship is that models demonstrate and explain how they deal

> with ill-defined, complex, and risky problems and give the learners an opportunity to approximate this behavior under risk controlled conditions. (p. 75)

The purpose of cognitive apprenticeship is not to develop skills, although that may be an outcome. Rather, the purpose is to help individuals learn to perform particular types of tasks and solve specific types of problems competently by providing access to knowledge that traditional forms of instruction cannot offer. Much knowledge about how to perform in the real world is held tacitly. By asking people with real-world experience to articulate their thinking, much tacit knowledge can be made explicit. In this way, cognitive apprenticeship benefits learners from a wide range of backgrounds. Novice learners can be guided through complex and risky situations while learning from others how to manage challenging situations. Experienced learners also benefit from cognitive apprenticeships, since they can be mentored by experts.

In concluding, Brandt et al. (1993) stated,

> Cognitive apprenticeship . . . differs markedly from forms of instruction that teach content with the assumption that students will be able to apply it on their own successfully at some time in the future. It is also very different from types of instruction that rely exclusively on self-directed learning, in which learners seek to learn the what, how, when, and why on their own. Because it controls the level of risk and complexity of what is being learned and provides access to tacit knowledge, cognitive apprenticeship is a useful tool for helping adults learn to perform ill-defined, complex, and risky tasks. (p. 77)

Humanist Theory

Interest in cognitive learning theories focused attention on the integral connection between cognitive and affective learning processes (Brandt et al., 1993). The shift to include affective as well as cognitive dimensions of learning gave rise to humanist theories. Humanist learning theories take into account the potential for human growth. By the 1970s and early 1980s, Maslow and

Rogers emerged as major proponents of the humanist movement. Rejecting the notion that one's behavior is predetermined by environment or by one's subconscious, humanists held that people possess unlimited potential for growth and development. They viewed humans as being in control of their own destiny, inherently good, and free to act independently. Humanists considered behavior to be the consequence of human choice (Merriam & Caffarella, 1999).

As founder of humanist psychology, Maslow (1970) examined factors influencing human performance and behavior. Maslow proposed that people operate from one of five levels of personal psychological needs, each level generating a different set of behaviors. These levels form a hierarchy in which lower order needs must be satisfied before higher order needs can be met. In his hierarchy of needs, Maslow identified five basic levels: physiologic needs (food, water, and shelter); safety needs (security, stability, dependency, structure, order, laws, limits, protection, and freedom from fear, anxiety, or chaos); belongingness and love needs; esteem needs (self-respect, self-esteem, and esteem of others); and self-actualization needs (desire to become all one can be, and to reach one's potential for growth and development). The self-actualized person possesses strong inner direction, seeks self-growth, and is highly motivated by loyalty to cherished values, ethics, and beliefs.

According to Maslow's (1970) view, learning is intrinsically motivated. One's growth is motivated by the need for cognition and the desire to know and understand. People seek self-actualization through learning. Therefore, educators' role is to facilitate the learning process (Merriam & Caffarella, 1999).

Rogers followed in the 1980s to build on Maslow's (1970) humanist psychology. Rogers' well-recognized client-centered therapy is often compared

to student-centered learning (Merriam & Caffarella, 1999). Like Maslow, Rogers focused on personal growth and development as an outcome of significant learning experiences. Significant learning experiences, Rogers suggested, embody the following characteristics: personal involvement (involving both affective and cognitive aspects in the learning event); self-initiated (sense of discovery must come from within); pervasive (learning makes a difference in behavior, attitudes, perhaps even personality of the learner); evaluated by the learner (learner can best determine whether experience is meeting a need); and lastly, essence is meaning (meaning of learning experience becomes incorporated into learner's total experience).

The influences of humanist theory and principles are evident in contemporary adult learning approaches. Two tenets of adult learning theory reflect humanist contributions: that perceptions are centered in experience and that individuals have the freedom and responsibility to become all they are capable of becoming. Clearly, Rogers' principles of significant learning and Maslow's (1970) views on self-actualization have been broadly incorporated into adult learning theory and practice. Merriam and Caffarella (1999) concluded,

> The focus of learning is on the individual and self-development, with learners expected to assume primary responsibility for their own learning. The process of learning, which is centered on learner need, is seen as more important than the content; therefore, when educators are involved in the learning process, their most important role is to act as facilitators, or guides. (p 258)

Constructivist Theory

A more recently emerging yet less clearly defined learning perspective is the constructivist orientation. Constructivism, encompassing several related

learning theories, holds that learning is a process of constructing meaning from experience. Constructivism addresses the way people make sense of their experiences. Beyond those assumptions, "constructivists differ as to the nature of reality, the role of experience, what knowledge is of interest, and whether the process of meaning making is primarily individual or social" (Merriam & Caffarella, 1999, p. 261).

The works of numerous learning theorists converge in the constructivist orientation. Contributions have come from von Glaserfeld's work in math and science education, Kant's notions of knowledge and experience, feminist theory on construction of knowledge, Kuhn's work on scientific paradigms and revolutions, Vygotsky's and Piaget's theories of cognitive development, and Dewey's assumptions about knowledge and experience. What remains at issue, however, is the debate surrounding personal versus social constructivism.

From the perspective of personal constructivism, meaning is created by the individual and is dependent on the learner's previous and current knowledge structure. Thus, learning is an internal cognitive activity. Learning occurs when experiences and events cause cognitive conflict, thereby encouraging learners to develop new knowledge structures better suited to the experience. The educator's role is to facilitate and negotiate meaning with the learner.

From the perspective of social constructivism, meaning is created when individuals are engaged in sharing problems or tasks. Thus, learning is a dialogic process in which individuals are introduced to a learning culture by more experienced and knowledgeable members of that culture. In this way, the

social constructivist approach involves learning the culturally shared ways of understanding and talking about the world and reality (Merriam & Caffarella, 1999).

Elements of constructivist orientation are found throughout much of adult learning theory. Constructivist principles of learning are consistent with principles of self-direction, given the emphasis on combined characteristics of active inquiry, independence, and individuality in learning experiences. Concepts of situated learning, reflective practice, communities of practice, and cognitive apprenticeship are common to both constructivist and adult learning literature (Merriam & Caffarella, 1999).

Social Learning Theory

Like constructivism, social learning theories draw from, yet differ significantly from, the behaviorist, cognitivist, and humanist theories of learning. Social learning theory holds that people can learn simply through observation of others in social settings. A lingering question has been exactly how observational learning occurs.

Early studies in the 1940s attempted to examine observational learning. In keeping with behaviorist theories of the time, arguments were based on stimulus-response and reinforcement principles. Researchers argued that people cannot learn from observation alone; rather, the observed behavior must be imitated and reinforced in order to be learned (Merriam & Caffarella, 1991, 1999).

In the 1950s, Rotter (1954) combined principles of behaviorism, cognitivism, and personality theory to address social learning. Rotter's theory incorporated concepts of behavior, personality, experience, and environment

into seven propositions and attendant corollaries of human behavior in social contexts. His concepts of expectancy and reinforcement furthered understanding of which behaviors, once acquired, were most likely to occur in a given situation. Expectancy, according to Rotter, is the likelihood that a particular reinforcement will occur as the result of specific behavior. Thus, the way in which a person constructs or defines a situation will affect the values of both reinforcement and expectancy, thereby influencing the potential for a given behavior to occur. Understanding the ways in which expectancies generalize and shift across situations has contributed to further understanding of the learning process.

From Rotter's work emerged the concept of locus of control. Noting that some people attribute their successes and failures to factors over which they perceive no control, Rotter put forth the concept of external locus of control. On the other hand, people who attribute their success and failures to personal and internal factors exhibit internal locus of control. Rotter's concept of locus of control contributed to the understanding of adult motivation to engage in learning activities.

By the 1960s, Bandura's work moved social learning theory from the behavioral to the cognitive realm by focusing on the covert, cognitive processes involved in observation rather than focusing on subsequent behavior (Merriam & Caffarella, 1991, 1999; Perry & Bussey, 1984). In discussing his theoretical perspective, Bandura (1977) explained,

> In the social learning view, people are neither driven by inner forces nor buffeted by environmental stimuli. Rather, psychological functioning is explained in terms of a continuous reciprocal interaction of personal and environmental determinants. Within this approach, symbolic, vicarious, and self-regulatory processes assume a prominent

> role. Psychological theories have traditionally assumed that learning can occur only by performing responses and experiencing their effects. In actuality, virtually all learning phenomena resulting from direct experience occur on a vicarious basis by observing other people's behavior and its consequences for them. The capacity to learn by observation enables people to acquire large, integrated patterns of behavior without having to form them gradually by tedious trial and error. (pp. 11-12)

If knowledge could be acquired only through actions, Bandura (1986) reasoned, the process of cognitive and social development would be both significantly impeded and exceedingly tedious. Learning opportunities would be limited by time, resource, and mobility constraints. In the absence of observational learning and modeling, considerable effort would be expended on costly errors and needless effort. Bandura emphasized the importance of an abbreviated acquisition process through observational or vicarious learning, pointing out that it is essential for both development and survival. Because some learning situations carry significant risks and costs, the potential consequences of trial and error learning are often unacceptable. In Bandura's (1977) words, "The more costly and hazardous the possible mistakes, the heavier is the reliance on observational learning from competent examples" (p. 12).

In addition to avoiding unacceptable risks and costly errors, observational learning is likewise essential in situations involving complex behaviors which can only be produced through the aid of modeling. In discussing the remote possibility of spontaneously reproducing behaviors formed by unique combinations of elements selected from numerous possibilities, Bandura (1977) emphasized,

> Where novel forms of behavior can be conveyed effectively only by social cues, modeling is an indispensable aspect of learning. Even

> when it is possible to establish new behaviors through other means, the process of acquisition can be considerable shortened through modeling. (p. 12-13)

The human capacity to use symbolic process provides a means for solving problems without the need to attempt all the various alternative solutions. It allows people to foresee probable consequences to various behaviors and to adjust their behavior accordingly. In the absence of symbolic process, humans would be incapable of reflective thought. Therefore, symbolic activity cannot be neglected in theories of human behavior.

Self-regulatory process, another prominent feature of social learning theory, explains how people choose appropriate behaviors from numerous possibilities. By arranging environmental rewards, generating cognitive supports, and producing consequences for their own behaviors, humans are capable of exerting control over their behaviors. External influences, however, do not refute the fact that once established, self-regulation plays a role in determining which actions one performs (Bandura, 1977).

In summarizing, Bandura (1977) concluded,

> A comprehensive theory of behavior must explain how patterns of behavior are acquired and how their expression is continuously regulated by the interplay of self-generated and external sources of influence. From a social learning perspective, human nature is characterized as a vast potentiality that can be fashioned by direct and vicarious experience into a variety of forms within biological limits. (p. 13)

In accounting for origins of behavior, Bandura maintained that complex behaviors do not emerge as intact patterns. Instead, they are shaped by numerous preceding events. At the most basic level, learning is shaped by response consequences. Response consequences serve multiple functions: to provide information, to serve as motivators through incentive value, and to

strengthen response patterns. While reinforcement effectively regulates previously learned behaviors, it is a relatively ineffective method of establishing new behaviors.

Learning would be both tedious and risky if learners depended entirely on response consequences as sources of information. Fortunately, as Bandura pointed out, human behavior is most often learned vicariously through modeling. By observing others, one gains understanding of how specific behaviors are performed. Later, this coded information on modeled behavior serves as a guide for action.

Observation provides a symbolic representation of the modeled activity, which later serves as a guide for appropriate performance. This process of observational learning is governed by four components. First, observers must attend to and accurately perceive the significant features of the modeled behaviors. Observer characteristics and the complexity and salience of modeled behaviors are primary influences on the rate and level of observational learning that occurs. Second, observation of modeled behavior must be remembered. Observational learning is dependent on both imaginal and verbal retention. Once modeled behaviors have been transformed into retrievable images and verbal symbols, these memory codes serve as performance guides. The highest level of observational learning occurs through first organizing and rehearsing the modeled behavior symbolically, then enacting it overtly. Third, symbolic representation is transformed into appropriate behaviors. Skills mastery is not achieved through observational learning alone. Instead, learners closely approximate the target behavior through modeling, then depend on feedback, self-correction, and focused

demonstration on specific segments not yet mastered. Fourth, modeled behaviors with desirable consequences are more likely to be adopted than modeled behaviors with unrewarding or punishing outcomes. Bandura (1977) made the critical point:

> Because of the numerous factors governing observational learning, the provision of models, even prominent ones, will not automatically create similar behavior in others. One can produce imitative behavior without considering the underlying processes. A model who repeatedly demonstrates desired responses, instructs others to reproduce the behavior, prompts them physically when they fail, and then rewards them when they succeed, may eventually produce matching responses in most people. . . . In any given instance, then, the failure of an observer to match the behavior of a model may result form any of the following: not observing the relevant activities, inadequately coding modeled events for memory representation, failing to retain what was learned, physical inability to perform, or experiencing insufficient incentives. (p. 29)

Social learning theory holds that behaviors are learned symbolically by processing response information prior to performing the actions. Thus, learners' actions are guided by prior notions rather than by reliance on outcomes to inform them of the appropriate steps. Additionally, observational learning can be enhanced by informing learners in advance of the benefits, rather than waiting until the learner happens to imitate the behavior and then rewarding. Therefore, reinforcement is facilitative rather than a necessary condition for learning.

Bandura (1977) emphasized the point about creativity and innovation in his modeling theory:

> Contrary to common belief, innovative patterns can emerge through the modeling process. When exposed to diverse models, observers rarely pattern their behavior exclusively after a single source, nor do they adopt all the attributes even of preferred models. Rather, observers combine aspects of various models into new amalgams that differ from the individual sources. Different observers adopt different

> combinations of characteristics. . . . It is diversity in modeling that fosters behavioral innovation. (p. 48)

In this way, modeling fosters creative development, which generates new patterns of behavior. Thus, even a slight departure from traditional patterns can provide new direction and innovation.

On the one hand, modeling provides innovation for new behaviors. At the same time, modeling may impede innovation. Bandura (1977) cautioned that as long as conventional routines function adequately, there is little incentive to consider alternatives.

> The unconventional is not only unexplored, but is usually negatively received when introduced by the more venturesome. . . . When models are unusually productive and observers possess limitied skills, their creative efforts may be self-devalued by the unfavorable comparison. Prolific creative modeling can thus dissuade the less talented. (p. 49)

Underlying Bandura's theory of observational learning is the assumption that humans do not simply respond to stimuli; they also interpret the stimuli. If people are to function effectively, they must anticipate the probable outcomes of various events and actions, then regulate their behavior accordingly. When learners observe others performing threatening activities without adverse outcomes, observers create vicarious expectations that they, too, will eventually succeed if they intensify and persist in their own efforts. Generally, observing others engage in successful behavior increases the tendency to act in similar ways, while observing others engage in punishing behavior decreases the tendency. However, people differ in the degree to which their behavior is influenced by modeling. Further, not all models are equally effective in influencing behavior. Responsiveness to modeling cues is largely determined

by three factors: characteristics of the model, attributes of the observer, and the response consequences associated with matching behavior.

According to Bandura, certain types of learners are more responsive to the influences of modeling. On the one hand, learners who lack confidence and self-esteem, who are dependent, and who have been routinely rewarded for imitative behavior are likely to adopt behaviors of successful models. On the other hand, learners who are confident and perceptive are likely to emulate modeled behavior that is both useful and idealized. Bandura (1977) concluded, "When modeling is explicitly used to develop competencies, the more talented and venturesome are apt to derive the greater benefits from observation of exemplary models" (p. 89).

In general, social learning theory advanced understanding of the adult learning process by examining the interaction of behavior, personality, and environment or learning context. Bandura's work on observational learning and modeling and Rotter's work on expectancy and locus of control contributed significantly to understanding the process of socialization and social role acquisition (Merriam & Caffarella, 1991, 1999). Social learning theory later laid the foundation for examination of the nature of mentoring and its role in adult learning contexts.

Mentoring

The concept of mentoring originated in the late eighth century, B.C., in Homer's epic poem, *The Odyssey*, in which Mentor was given responsibility for nurturing and guiding Odysseus' son, Telemachus. Contemporary definitions of mentor include guide, teacher, counselor, advisor, coach, trainer, protector,

supporter, and master (Odell, 1990). The term mentor, as presently used in higher education, usually denotes "teacher of adults" (Daloz, 1986, p. 20).

Daloz (1986) outlined three distinct roles for mentors: to support, to challenge, and to provide vision. The mentor supports by affirming the validity of the protege's experience. The function of support is to draw protege and mentor closer together. This closeness most often develops through mutuality, usually when mentor and protege are matched by style and ideology (Odell, 1990). In contrast, the function of challenge is to provide separation between the protege and the mentor as well as the environment (Daloz, 1986). As Kay (1990) pointed out, the protege must actively seek to become self-reliant. To complete the transformation initiated by support and challenge, mentors must provide vision and direction for the protege (Daloz, 1986). Thus, effective mentoring relationships are dependent on mutual participation of both mentor and protege (Kay, 1990).

Mentor teachers must possess knowledge, wisdom, and competency (Odell, 1990) and must be expert teachers (Daloz, 1986). Merriam and Caffarella (1991) distinguished novice from expert thinking. Not only do experts possess a greater wealth of knowledge, but they also think differently than novices. Novices organize their knowledge explicitly around literal objects in a given problem situation. In contrast, experts organize their knowledge around principles and abstractions that subsume these objects and possess insight about the application of their knowledge. While mentors must be expert teachers of children, it does not follow that all expert teachers will be effective mentors of adult learners (Odell, 1990).

Kay (1990) developed a set of six principles for effective mentoring, derived from theories of learning, motivation, human development, and organizational behavior. (a) Self-reliance is facilitated when the protege receives encouragement and unconditional acceptance. (b) The limits on the comprehensiveness of the mentoring relationship are defined through mutual consent of the mentor(s) and the protege. (c) The comprehensiveness of a mentoring effort is a function of the resources and expertise made available to the protege. (d)The comprehensiveness of a mentoring effort is a function of the generalizability within the defined environment of the attitudes, skills and behaviors developed by the protege. (e) Mentors should put the growth of their proteges above their own needs except where both can be served without sacrificing the former. (f) People who are themselves self-reliant are more willing and able to help others become the same.

In any given program, there exists an implicit expectation that the mentor will vary his or her role to meet the need of the protege. In doing so, mentors will likely fulfill their role in different ways. Huling-Austin (1990) concluded that not only do different mentors conceptualize their role differently, but their conceptualization of the role greatly influences what they do on a day-to-day basis in their interactions with their protege. There is no single formula for mentoring. To be effective, mentors must consider the individual characteristics and needs of the protege, the learning context, and the overall program.

Several related fields of study provide a knowledge base for mentors. The study of mentoring emphasizes the mentor's role, responsibilities, and relationship with the protege. The study of clinical supervision emphasizes supervisory techniques and classroom observation. Coaching and modeling

promote collegial learning through demonstration, practice, and transfer of skills. Adult development offers insights into cognitive, conceptual, and personality factors that influence adult learning. Finally, the study of interpersonal skills is essential to acquiring the skills necessary to create and sustain mentoring relationships. Bey (1990) emphasized that content knowledge alone is not sufficient because some mentoring skills and abilities are only learned effectively through practice.

## Research on Supervisory Effectiveness

### Studies Investigating Benefits of Effective University Supervision

The effectiveness of university supervision for student teachers has long been debated, with concerns and questions remaining nearly constant over time. Some 30 years ago, for instance, Bennie (1964) observed that "the campus supervisor of student teaching is generally accepted as an important factor in the student teaching experience, but little has been done to analyze the effectiveness of the supervisory function" (p. 131). More recently, Johnson (1987) suggested that university supervision may be considered either effective or ineffective, depending on how the importance of the supervisor's role was measured.

> If the importance of the supervisor is measured against the amount of change in practicum students' teaching behavior as a result of being supervised, then the role of the supervisor seems minimal. On the other hand, if the importance of the supervisor is measured against the contribution to the smooth operation of the field-based experience, then the role seems to be significant. (p. 121)

In the past three decades, several studies have been undertaken in an effort to determine the effectiveness of university supervision. Of those studies, only three resulted in findings that identified benefits of university supervision.

In the earliest of those three studies, Bennie (1964) surveyed 171 first -year teachers who had graduated the previous year from the University of Texas. Participants, selected randomly from teacher placement files, included 71 elementary teachers and 100 secondary teachers. Graduates were asked to make judgments about the amount of help they received from their university supervisor and cooperating teacher during their student teaching, using a forced-choice 3-point system (i.e., great help received, some help received, little or no help received). Of the 171 respondents, 105 (61%) reported receiving great help from their university supervisor, and 97 (57%) reported receiving great help from their cooperating teachers. When asked to report about receiving some help, 51 (30%) graduates credited their university supervisor, while 47 (27%) gave credit to their cooperating teacher. Only 15 (9%) respondents reported receiving little or no help from their university supervisor, while 27 (16%) reported receiving little or no help from their cooperating teacher. From these data, Bennie concluded that the amount of supervisory help from both sources was approximately the same, with university supervisors being credited with slightly more help than cooperating teachers. However, Bennie stressed that these findings could become more significant when one considers that the cooperating teacher spends considerably more time with the student teacher than does the university supervisor.

The second study examining the effectiveness of university supervision was conducted by Zimpher et al. (1980), as they expressed concern about the seemingly abundant descriptive data about the nature of student teaching but obvious lack of intimate knowledge about what happens to student teachers, university supervisors, and cooperating teachers during the semester of student

teaching. In this qualitative study, the researchers attempted to document events and interactions through (a) the use of audiotaped interviews with each student teacher, (b) interviews with university supervisors, (c) audiotapes of all conferences between any members of the student teaching triad, (d) records of classroom observations of each student teacher by the university supervisor, and (e) any additional written documentation. Data analysis was guided by repeatedly posing the question, "What is this member of the triad doing, and to what end?"

The findings of Zimpher et al. (1980) provide evidence of some benefits of university supervision. They concluded that if the university supervisor had not been directly involved in the student teaching experience, there would have been no direction set for requirements, evaluation, or assessment of the student teacher's field-based experience. Additionally, they found evidence that informational communication among participants of the student teaching triad was enhanced by the university supervisor. Finally, they concluded that even though university supervisors seemed to be frustrated by a lack of direct influence on student teachers' teaching practices, the university supervisor appeared to be the only one making critical contributions to the student teacher's progress.

These findings led the authors to more general conclusions about the nature of supervisory practices. Zimpher et al. (1980) emphasized that "university supervisors appear to do more in their role than the topic of research reports would indicate. They must survive in many worlds and be many things to many people" (p. 140). The authors cautioned that their conclusions, although data-based, were somewhat speculative. However, they found strong

evidence that university supervisors' roles are extremely complex. Eliminating the role of the university supervisor would mean those functions reported in this study would either not be done at all or would be done by someone else; yet, many of those functions require input from someone in a role outside the school setting.

A third study which identified benefits of university supervision was reported by Johnson (1987). Citing inconsistent and inconclusive findings of earlier studies as a need for longitudinal investigation of university supervision, Johnson (1987) surveyed 79 University of Illinois seniors who had completed coursework for the Specialized Instruction program and were completing their semester of practicum. The Specialized Instruction program, offered through the Departments of Special Education, Elementary, and Early Childhood Education, was intended to provide preservice teachers with the skills to individualize instruction for children with mild learning and behavior problems in regular classrooms. Data were collected over a 3-year period, during which time seven special education doctoral students and one visiting assistant professor served as university supervisors. During this period, each supervised between 3 and 28 students, with a mean of 10 students. University supervisors made five to ten 1- or 2-hour observations, depending on student needs. During the visits, the supervisor observed the student teaching, completed evaluation forms, and met with the student to discuss the observation, practicum assignments, and goals for future observations. At the end of the student teaching semester, each student completed an evaluation of the university supervisor's performance, responding to three questions: (a) What things did

your supervisor do that you found helpful? (b) What things did your supervisor do that were not helpful? (c) How could supervision be improved?

Data were analyzed through content analysis. Reliability, determined by two independent raters, was high, with mean Kappa and percentage agreement of .98 and .95, respectively. Responses across university supervisors was evenly distributed for all three questions; therefore, general responses to each question were reported.

In response to the question, "What things did your supervisor do that you found helpful?," most students (71%) indicated that the supervisor was most helpful when acting as a consultant and providing suggestions for solving particular problems. Providing evaluative feedback was mentioned by 51% of the students. Also frequently mentioned were being available (47%), providing support (35%), providing suggestions for improvement (28%), and being positive (25%). Taken together, student responses led Johnson (1987) to conclude that, in general, students perceived supervision to be most beneficial when it was evaluative, supportive, and provided suggestions for improvement.

The three studies (Bennie, 1964; Johnson, 1987; Zimpher et al., 1980) that investigated benefits of university supervision and spanned nearly three decades differed significantly in design and asked questions of a very different nature. While Bennie (1964) surveyed students using a 3-point forced-choice scale, both Johnson (1987) and Zimpher et al. (1980) employed a qualitative analysis of open-ended questions and examined multiple data sources (i.e., audio recordings, documents, interviews, observations of students and cooperating teachers). The earliest study (Bennie) documented university supervision as being beneficial; later studies identified roles (Zimpher et al.)

and behaviors (Johnson, 1987) that appeared to be characteristic of effective university supervision.

Studies Investigating Barriers to Effective University Supervision

Like the dearth of empirical studies on the benefits of university supervision, surprisingly few empirical studies on the barriers to effective supervision exist. However, over the years, much has been written and discussed about the pitfalls of university supervision. As O'Shea (1987) emphasized, "Effective supervision of student teachers has presented a challenge for teacher educators for years" (p. 71). Others have harsher words: "The college supervisor has been most often criticized for not fulfilling his expected role. In fact, inadequate supervision has been described as the number one problem facing student teaching today" (Diamonti, 1977, p. 477). Boydell (1986) added yet another disturbing note in observing that "despite the growing research interest in many aspects of teacher education, teaching practice supervision has, until relatively recently, received scant attention" (p. 115).

Common concerns about barriers to effective university supervision emerge from teacher education literature and have, in fact, tended to remain relatively unchanged over the past two decades. The most commonly mentioned barrier is the difficulty inherent in maintaining balance in interpersonal relationships within a triadic arrangement (Boydell, 1986; Diamonti, 1977; Emans, 1983; Hoover, O'Shea, & Carroll, 1988; Johnston & Hodge, 1981; McIntyre, 1983; McIntyre & Morris, 1980). The challenge of providing effective supervision without well-defined performance standards and adequate personnel preparation is also frequently discussed (Diamonti, 1977;

Hoover et al., 1988; Johnston & Hodge, 1981; Morris, 1974; O'Shea, 1987). Because effective supervision is labor intensive, university supervision can be adversely affected by time constraints on university faculty (Buck et al., 1992; Johnston & Hodge, 1981; Morris, 1974; Yee, 1968) who may experience underfunding, lack of administrative support, and low status within the university community (Hoover et al, 1988.; Morris, 1974; Warger & Aldinger, 1984; Yee, 1968). Other concerns center around the nature of field-based experiences. For instance, the context within which student teaching occurs presents potential barriers (Boydell, 1986; Warger & Aldinger, 1984). Having no formal status in the classroom, the university supervisor frequently defers to the cooperating teacher, whose primary responsibility is to ensure pupil learning, not improved student teacher performance (Warger & Aldinger, 1984). Additionally, the purposes of student teaching may be undefined or ambiguous (O'Shea, 1987; Warger & Aldinger, 1984). University supervisors often assume the role of evaluator, using checklists and observational data to determine which student teachers should graduate and be certified (Warger & Aldinger, 1984). Seldom does the supervisor use this information as a basis for diagnosis and remediation (Demchak & Browder, 1987; Warger & Aldinger, 1984), and even then one semester is usually insufficient time to substantially improve student teachers' performance (Buck et al., 1992; Zimpher et al., 1980).

While much has been written about barriers to effective university supervision, only two empirical studies have been reported. In an early study on interpersonal relationships in the student teaching triad, Yee (1968) discovered trends within triadic relationships that threatened the likelihood of

effective supervision. In a study of 124 student teachers (44 elementary and 80 secondary) , 124 cooperating teachers, and 12 university supervisors (4 elementary and 8 secondary) from the University of Texas, Yee (1968) posed the following questions: What patterns in triad attitude relationships are there at the beginning and toward the end of the student teaching period? Are there trends in the shifting of attitude relationships from pre- to posttest occasions? If so, what interpretations concerning triad cohesiveness can be made from such trends? Attitudes of each triad member toward the other two members were obtained with inventories and questionnaires designed for this study. Student teachers' attitudes toward their cooperating teacher's and university supervisor's affective, cognitive, and general merit were measured. Cooperating teacher's and university supervisor's perceptions about other triad members were recorded on a 7-point Likert-type scale. Pretests were administered during the first 2 weeks of the student teaching semester, and posttests were administered toward the end of the semester. Split-half reliability coefficients in the .90s were reported. Dyadic relationships were considered positive if each member's attitude toward the other was positive and negative if members reported negative attitudes toward each other. Thus, a triad was judged to be either balanced (i.e., in a state of equilibrium) or unbalanced (i.e., in a state of disequilibrium) based on its dyadic relationships.

From a lengthy and complicated data analysis, Yee (1968) found significant shifts in triadic balance. At pretest, 42 (34%) of the 124 triads were positively balanced (i.e., in a state of equilibrium). By the end of the semester, only 4 (3%) triads remained positively balanced. In almost half of the shifts, a negative dyad developed between the university supervisor and the student

teacher, while the relationship between the student teacher and the cooperating teacher remained positive. Yee (1968) interpreted the findings and summarized,

> The student teaching triad appears to seek greater dyadic balance at the cost of decreased triad cohesiveness. Balance is found in dyadic coalitions, especially between the leaders; and negative dyads between leaders and the student teacher. . . . Triad relationships more often resemble competitive triad settings than cooperative triad situations. . . . The reason . . . may very well be that typical student teaching programs provide little opportunity and purpose for meaningful triad interaction. (p. 106)

Although Yee (1968) was able to document consistent trends in the shift of triadic balance during the student teaching semester, his study did not attempt to determine the circumstances under which those shifts occurred.

In a later study, Richardson-Koehler (1988) investigated the barriers to effective supervision of student teaching. Suspecting that factors other than time constraints might account for university supervisors' low impact on student teaching performance, Richardson-Koehler examined underlying assumptions about how teachers learn to teach. Through the use of formal and informal observations and interviews, the investigator studied 14 elementary student teaching triads, 7 each in the fall and spring semesters. All student teachers were in their final semester of the teacher education program. Data sources included student teachers' reports and observations of discussions with cooperating teachers, informal and formal interviews with cooperating teachers, and observations of students teaching in the classroom.

Richardson-Koehler (1988) found that within the first 2 weeks of student teaching, the student teachers were discounting previous knowledge from university coursework and relying on learning to teach through the experience

of teaching. Within 1 month, when asked about the origins of classroom practices, 80% were attributed to the cooperating teacher, 15% to methods classes, and 5% to original ideas.

The student teaching context was found to present additional barriers. Although student teachers were required to assume full teaching responsibility for 3 weeks, it was an unrealistic expectation because the student teachers were generally compelled to work within classroom structures and routines already established by the cooperating teacher. Any discussion of routines constituted a potential criticism of the cooperating teacher's performance. Sensing that the university supervisor was assessing both the student teacher and the cooperating teacher, half of the cooperating teachers felt the need to protect their student teachers during the final assessment session. Given the structure and context of the environment, the degree to which the university supervisor is able to affect the student teacher's classroom practices is questionable (Richardson-Koehler, 1988).

In concluding, Richardson-Koehler (1988) identified three barriers to effective university supervision. First, the student teachers were not exposed to a model of learning to teach that relied on rigorous analysis of teaching and collegiality. Instead, they adopted the norm of learning to teach from experience. Second, the cooperating teachers' lack of ability, or unwillingness, to reflect on classroom practices, either theirs or their student teacher's, contributed to the overall poor quality of feedback provided to the student teachers. Third, the university supervisor was not able to affect the feedback process by working with individual dyads. Instead, the supervisor, caught

between the demands of the university and the school setting, was unable to spend the time necessary to build a trusting relationship.

The two empirical studies of barriers to effective university supervision, one quantitative (Yee, 1968) and one qualitative (Richardson-Koehler, 1988), tend to support opinions so frequently cited in the literature but leave much undocumented. While Yee's (1968) study provides in-depth data analysis of interpersonal relationships within a large sample of student teaching triads, in no way does it inform us about the process, context, or content of the negative shifts within those relationships over time. On the other hand, Richardson-Koehler's close examination of a few student teaching triads provides information about the process, context, and content of the student teaching experience. However, during that 20-year gap, there are no other studies reported in the literature that directly address barriers to effective university supervision.

Research on Sources of Influence on Student Teachers

Along with growing research interest in many aspects of teacher education comes increased interest in the sources of influence on the student teaching experience. As Boydell (1986) pointed out, mounting evidence concerning the relative influence of cooperating teachers and university supervisors raises serious implications for student teacher supervisory practices. Others have been more emphatic: "Since, according to some evidence, the supervisor doesn't have a significant role in the development of student teachers, the most sensible plan would be to stop supervising" (Bowman, 1979, p. 30).

However, most researchers have found middle ground, and even ambiguity (Bennie, 1964; Metcalf, 1991), in reaching their conclusions about sources of influence on student teachers. While there seems to be a consensus that cooperating teachers influence students teachers (Friebus, 1977; Richardson-Koehler, 1988; Seperson & Joyce, 1973), there is less certainty about the influence of university supervisors on student teachers (McIntyre, 1983; McIntyre & Morris, 1980; Metcalf, 1991; Yee, 1968, 1969). In fact, McIntyre and Morris suggested that cooperating teachers may influence student teachers' attitudes differentially, while Zeichner (1980) webt even further in stating that few researchers have actually examined the ways in which student teachers are shaped by and in turn shape the institutions in which they work. Yee (1969), in analyzing data on triadic relationships, expressed a similar concern that researchers have neglected to consider the student teacher's influence on the cooperating teacher.

Several researchers (Friebus, 1977; Hoover et al., 1988; Zeichner, 1980) have concluded that rather than defining a single paradigm to explain the way in which student teachers are influenced, it is more likely that there are several themes that include outside influences. Zeichner identified four such themes: (a) the influence of the classroom's ecological environment, (b) the influence of the cooperating teacher, (c) the development of utilitarian teaching perspectives, and (d) the conservative influence of the school bureaucracy. Teacher socialization has been widely accepted as a common source of influence on student teachers, as their belief systems shift over the course of student teaching from the more liberal views of the university to the more conservative views of the school culture (Beyer, 1984; Friebus, 1977; Hogben &

Lawson, 1983; Hoover et al., 1988; Pugach, 1992; Zeichner, 1980; Zeichner & Tabachnick, 1981).

A review of the literature on sources of influence on student teachers revealed three empirical studies (Johnson, 1986; Karmos & Jacko, 1977; and Seperson & Joyce, 1973). Karmos and Jacko's and Johnson's (1986) studies were similar in nature, seeking to identify individuals and events that had significant influence during the student teaching experience. Seperson and Joyce's study, on the other hand, attempted to examine the relationship between the teaching behaviors of student teachers and cooperating teachers over the course of the semester.

Seperson and Joyce (1973) followed 19 student teachers in the master's degree program at Teachers College, Columbia University, comparing the relationship between the teaching behaviors of the student teacher and the cooperating teacher over time. Student teachers had one semester of "observation-participation" experience when they were working in tutorial sessions with small groups of children. The second semester was spent student teaching in a classroom under the direction of a cooperating teacher.

Samples of the student teachers' teaching behaviors were collected on four occasions: during the first semester of small group tutorial experience without a cooperating teacher, early in the second semester of classroom teaching after being placed with a cooperating teacher, at mid-semester, and at the end of the student teaching semester. Samples of cooperating teachers' teaching behavior were obtained as well during the semester of student teaching. Data were categorized by teaching behavior and by teaching phase (i.e., tutorial, early student teaching, later student teaching). Data on

cooperating teachers were categorized in an identical manner. Correlations were then made between the student teachers' behavior at the "preteaching level", the "early student teaching level," and the "later student teaching level" with the indices of the cooperating teachers. Partial correlations then removed the effect of the early relationships to determine whether there was a cumulative relationship between the early and later student teaching behavior. In addition, the means of each index were calculated for the initial, early, and later student teaching behavior, and these were compared with the means for each index for the cooperating teacher (Seperson & Joyce, 1973).

The investigators interpreted the evidence to indicate that there were no relationships between the indices of the student teachers and cooperating teachers prior to their contact but that there were relationships in several of the indices very shortly after student teaching began. Those relationships continued even when they were adjusted for the early relationships. However, inspection of the different scores revealed no consistent pattern of influence once the early impact of the cooperating teacher had been felt (Seperson & Joyce, 1973).

Karmos and Jacko (1977) and Johnson (1986) took a very different approach to examining possible influences on student teachers. In both studies, the researchers asked student teachers to identify (a) significant people and (b) significant events in their student teaching experience. Karmos and Jacko surveyed 60 student teachers, asking them to list in order of importance the five persons who had most positively influenced their student teaching experience. They were then asked to give reasons for the perceived significance.

Responses to the first question fell into two categories of significant persons: professionals and nonprofessionals. Cooperating teachers were named as most significant by slightly more than half the student teachers. Nearly half of the remaining persons identified as most significant were nonprofessionals (i.e., friends, parents, spouse). Overwhelmingly, student teachers named cooperating teachers first, followed by center coordinators (Karmos & Jacko, 1977).

The reasons given by student teachers for naming significant others fell into three major categories: personal support, role development, and professional skills. Cooperating teachers were identified most frequently as providing both role development and personal support (with other student teachers, friends, and parents a close second), while college instructors were identified most frequently as providing professional skills (Karmos & Jacko, 1977).

In a similar, but more comprehensive investigation, Johnson (1986) studied eight seniors in the Specialized Instruction program at the University of Illinois and eight cooperating teachers in the Champaign-Urbana area. All students were in their final student teaching semester and had completed program coursework. Cooperating teachers all had completed postgraduate work and had at least 9 years of teaching experience.

Data were obtained from the competency ratings of student teachers completed by both the student teacher and their cooperating teacher and from a series of interviews conducted with the student teachers and their cooperating teachers. Student teachers were interviewed in the first, fifth and final week of student teaching. Cooperating teachers were interviewed in the fifth and final

week of student teaching. In each session, the following two questions were posed: What individuals have influenced the development of your (or your student teacher's) current abilities on each of the skill statements on the questionnaire? What experiences and events have influenced the development of your (or your student teacher's) current abilities on each of the skill statements on the questionnaire? (Johnson, 1986).

Through content analysis, eight categories of individual influence emerged: modeled behavior, provided structure, provided evaluative feedback, provided suggestions for improvement, was supportive, provided new information, provided reinforcement or motivation, and personal characteristic. Twelve categories of significant events emerged: lecture, class discussion, problem-solving activity, simulation exercises, unsuccessful to a successful experience, successful experience, unsuccessful experience, practice in the classroom, completion of the social project, completion of the academic project, completion of the curriculum-based assessment project, and completion of the self-directed project (Johnson, 1986).

Johnson's (1986) data provided a wealth of information about sources of influence on student teachers. By far, a major professor was most frequently named by student teachers as the most significant individual across all three categories (i.e., academic implementation, behavior management, and assessment). The most significant persons identified in academic implementation were children within the classroom, followed by the cooperating teacher. For behavior management, student teachers identified children within the classroom, cooperating teacher, and major professor with near even

frequency. Student teachers overwhelmingly rated a major professor as being the most influential in assessment.

Regarding the most significant event, student teachers most frequently identified classroom practice. The second most frequently mentioned event was unsuccessful-to-successful experience (Johnson, 1986).

In summarizing the findings, Johnson (1986) concluded that both student teachers and cooperating teachers perceived growth in skills during the student teaching semester. Cooperating teachers and major professors were most often given credit for skill acquisition. That cooperating teachers were frequently mentioned by student teachers as being influential was no surprise, given findings of other studies (Morris, 1974; Seperson & Joyce, 1973; Yee, 1969), but as Johnson (1986) noted, none of the findings from previous studies indicated that college professors were significant individuals for student teachers. Equally surprising was the frequency with which children within the classroom were mentioned as being influential.

Of the three studies on sources of influence on student teaching, (Johnson, 1986; Karmos & Jacko, 1977; Seperson & Joyce, 1973), only Johnson's (1986) research adds significantly to our understanding of the student teaching experience or provides implications for improving field-based experiences. The Seperson and Joyce study was fraught with methodological weaknesses to such an extent that few, if any, conclusions can be drawn from the findings. Karmos and Jacko's study validated long-held impressions but did not significantly contribute to the knowledge of influences on university supervision of student teachers.

## Reconceptualized Models of Student Teacher Supervision

### Historical Perspective

More than two decades have passed since Patty (1973) predicted an end to traditional models of student teacher supervision.

> It seems clear that, in the next ten to twenty years, the role of the College Supervisor as we know it today will be eliminated. The College Supervisor will be replaced by a classroom teacher....It is, therefore, time for department chairmen in universities to stop worshipping the holy trinity of three supervisory visits in the name of NCATE - at a terribly high expenditure of tax monies. (p. 183)

In the 25 years since Patty's (1973) prediction, much has been written about the need to reconceptualize and restructure models of student teaching supervision (Bowman, 1979; Boydell, 1986; Diamonti, 1977; Emans, 1983; Grimmett & Ratzlaff, 1986; McIntyre & Killian, 1987; McIntyre & Morris, 1980; Metcalf, 1991; Rust, 1988; Warger & Aldinger, 1984), but few models have been investigated and reported. Three empirical studies about restructured models of student teaching supervision are reported in the literature: one examining the effects of eliminating the university supervisor's role (Morris, 1974) and two investigating the effects of supervisory training for cooperating teachers (Boyan & Copeland, 1974; McIntyre & Killian, 1987).

### Studies of Reconceptualized Roles for University Supervisors

In the only study to investigate the effects of eliminating the role of university supervisors, Morris (1974) tested two null hypotheses: (a) There is no significant difference between the classroom performance of student teachers who receive supervision from the university supervisor and the classroom performance of those who do not. (b) There is no significant difference between

the adjustment of student teachers who receive supervision from the university supervisor and the adjustment of those who do not.

Ninety-six student teachers were randomly divided into two groups: those who received traditional university supervision (control group A) and those who were not assigned a university supervisor (experimental group B). Student teachers in group B (i.e., experimental) did not experience any of the normal supervisory functions of a university supervisor, such as observations, conferences, seminars, and evaluation, as did those student teachers in group A (i.e., control). For students in group B, the entire responsibility of supervision was assigned to the cooperating teachers, principals and schools.

At the beginning of the student teaching semester, group B students had an initial meeting with a university supervisor so that the research study and procedures could be explained. Cooperating teachers in group B were likewise informed and asked not to give their student teachers any special treatment. An effort was made to prevent any further contact with the university supervisor. Cooperating teachers and student teachers were instructed to contact the coordinator of student teaching for the school district in the event that interpersonal problems arose. If the problem could not be resolved by the school district coordinator, then the coordinator of student teaching at the university would be contacted and would assume responsibility for resolving the problem.

Two measures were used to test the hypotheses of the study (Morris, 1974). The *Purdue Teacher Evaluation Scale* was used to rate the performance of students teachers in the following areas: (a) ability to motivate students, (b) ability to control students, (c) subject matter orientation of teacher,

(d) student-teacher communication, (e) teaching methods and procedures, and (f) fairness of teacher. A portion of the *Purdue Student-Teacher Opinionaire* was used to measure five aspects of student teacher adjustment: (a) student teacher rapport with the supervising teacher, (b) student teacher rapport with the principal, (c) teaching as a profession, (d) student teacher rapport with the students, and (e) student teacher rapport with other teachers.

A Lindquist Type I design, 2x3 repeated measures analysis of variance (ANOVA) procedure, was used to analyze the data. One analysis was conducted for each scale of the *Purdue Teacher Evaluation Scale.* No significant differences were found on any measures of student teacher performance (i.e., ability to motivate students, ability to control students, subject matter orientation of teacher, student-teacher communication, teaching methods and procedures, and fairness of teacher). However, a significant interaction between groups on the student-teacher communication item led to further analysis, revealing that student teachers perceived themselves to perform better when the university supervisor took an active role in their experience.

A one-tailed t-test was used to analyze scores on the *Purdue Student-Teacher Opinionaire.* No significant differences were found on any of the measures (i.e., rapport with supervising teacher, rapport with principal, teaching as a profession, rapport with students, rapport with other teachers).

These findings led Morris (1974) to conclude that there was no significant difference between the classroom performance of student teachers who did and did not receive university supervision, except that student teachers in group A (i.e., control) perceived that they were performing better than did student teachers in group B (i.e., experimental). However, Morris recommended that

university supervisors should remain, primarily to serve as liaison, and to be available for counseling with student teachers as needed. Morris also proposed implementing and testing new models of university supervision, such as the use of audiotapes and videotapes, interaction analysis, and provision of in-service consultation for school personnel. In closing, Morris cautioned,

> While the results of this study indicate no significant difference between the performance and adjustment of student teachers who had a university supervisor and those who did not, the importance of the university supervisor in other roles should not be minimized. It is assumed that the university supervisor is important because he relates to teachers, supervisors, and administrators, and also because he provides feedback about the student teaching program to his college of education. (p. 362)

Studies of Reconceptualized Roles for Cooperating Teachers

Morris' (1974) study provides the only empirical data about the effects of restructuring the university supervisor's role; however, two other studies investigated the effects of supervisory training for cooperating teachers (Boyan & Copeland, 1974; McIntyre & Killian, 1987). While McIntyre and Killian's study examined student teaching experience as a measure of the effectiveness of training for cooperating teachers, Boyan and Copeland's study focused on field-test results of training material for cooperating teachers who supervise student teachers.

Training materials for cooperating teachers. Boyan and Copeland (1974) examined the effects of a training program initiated at the University of California at Santa Barbara to enhance the skills of cooperating teachers who work with student teachers. The training materials, Instructional Supervision Training Program (ISTP), were field tested in nine sites across the country.

In the initial phase of the project, 15 elementary and 14 secondary cooperating teachers participated in a training program. The following year, 26 additional teachers--11 elementary and 15 secondary--joined the training program. Without elaborating, the authors reported that "evaluation results revealed that the training delivered nearly all of the objectives of the program at levels judged satisfactory by the training staff" (Boyan & Copeland, 1974, p. 100). At this point, staff undertook development of training materials that could be used without direct intervention or training by the authors. Development involved (a) refining the prevailing view of supervision to which training would address itself, (b) designing specifications for the instructional package, (c) preparing the preliminary units of instruction, (d) pilot testing and revising the preliminary units of instruction, (e) field testing the instructional units, and (f) revising the units on the basis of field test results.

The training materials package, ISTP, included 10 terminal objectives (Boyan & Copeland, 1974):

> 1. Given a pre-observation conference setting, together with the supervisee, to identify and define behaviorally an area of concern.
> 2. Given a pre-observation conference setting, to determine whether the establishment of a base rate or the setting of criteria is appropriate.
> 3. Given a pre-observation conference setting in which the establishment of criteria is appropriate, together with the supervisee (a) to identify criteria for the successful performance of a terminal goal; (b) when such criteria are not realistically within the present capabilities of a supervisee, to identify criteria for the successful performance of intermediate goals.
> 4. Given a statement of a supervisee's area of concern, to select, construct, or adapt an instrument for systematically recording the occurrence of teaching/learning behaviors which may be related to the area of concern.
> 5. Given an instrument for systematically recording the occurrence of specific teaching/learning behaviors, to utilize the instrument to make non-evaluative observations in a classroom setting.

6. Given the data resulting from the systematic observation of teaching/learning behaviors in a classroom setting, to analyze the data by performing the following operations: (a) construct a data display; (b) make summary statements; (c) where criteria of successful performance have been established, determine if the criteria have been met; (d) identify patterns of behavior; and (e) make comparisons between observations.

7. Given the results of an analysis of data from a systematic observation, to identify: (a) supervisee behaviors that are positive in terms of their possible pupil effects and should be maintained; (b) supervisee behaviors that are negative in terms of their possible pupil effects and should be changed; and (c) alternate strategies for producing changes in supervisee behavior.

8. Given a post-observation conference setting and given the data from the observation and analysis, to perform the following operations: (a) review with the supervisee the agreed upon area of concern, its behavioral definition, the decision to obtain a base rate or the criterion that was set, and the observation instrument; (b) guide the supervisee in an analysis of the observed data which will approximate the complete analysis obtained by the supervisor; (c) assist the supervisee in identifying behaviors which are positive in terms of their possible pupil effects and should be maintained; (d) assist the supervisee in identifying behaviors which are negative in terms of their possible pupil effects and should be changed; (e) formulate with the supervisee strategies for achieving the desired changes; and (f) determine with the supervisee if additional cycles of the ISP are necessary.

9. Given a pre- or post-observation conference setting, establish clear communication between supervisor and supervisee by utilizing communication skills, such as paraphrasing, perception checking, asking clarifying questions, offering information, and active, attentive listening.

10. Given a pre- or post-observation conference setting, and an understanding of the distinction between "freeing" and "binding" statements, to demonstrate the use of freeing and binding responses in order to encourage the growth of autonomous behavior in the supervisee. (p. 102)

During the spring of 1973, materials were field tested at eight sites across the nation, involving 76 experimental and 31 control group participants. In addition to the terminal objectives, the training materials package included a Training Coordinator's Guide, a set of Readings, an associated set of Handouts, five videotapes, and four audiotapes. Results of pre- and posttests were analyzed using a Solomon Four-Group research design. Homogeneity of

groups and equal distribution of subjects in experimental and control groups was controlled. Test-retest reliability yielded a mean Pearson correlation coefficient (r) of .99. Of the 60 different scores available for analysis of training effects, 53 of the scores were in the desired direction, and 45 were statistically significant. Only two of the few scores which were in the undesired direction were statistically significant. Following data analysis and interpretation, each segment of the training package was revised. Overall, the training materials proved to be effective in improving the skills of cooperating teachers in four areas: observing, analyzing, prescribing, and counseling (Boyan & Copeland, 1974).

Supervisory training for cooperating teachers. In a later study, McIntyre and Killian (1987) also sought to validate the effectiveness of training for cooperating teachers who supervise student teachers. Unlike Boyan and Copeland (1974), who focused on results of field-tested training materials, McIntyre and Killian instead focused on the student teaching experience as a measure of effectiveness. McIntyre and Killian studied 36 practicum students who were in their first of three field experiences at Southern Illinois University. Of the 38 students, 17 were in elementary and 19 were in secondary settings: 10 were majoring in elementary education; 5 in special education; 4 in science, 3 each in speech pathology, social studies and business; 2 each in physical education, industrial arts, and art; and 1 each in math and English. They were required to spend one-half day per week for 16 weeks in their placement, participating in classroom interactions and assisting the cooperating teacher with instruction or activities, but were not given complete responsibility for initiating instruction or for maintaining large group instruction.

Eleven of the 36 student teachers were placed with cooperating teachers who had completed a 3-hour graduate course in supervision of preservice teachers, focusing on skills in observing, communicating, and providing critical feedback. The remaining 25 were placed with cooperating teachers who had no formal supervisory training.

At the end of each week, student teachers were asked to respond to three open-ended questions: (a) Describe what you did during your observation. What activities did you participate in, direct, or assist? (b) What kind of interactions did you have with the students? (c) What kind of interactions did you have with the cooperating teacher? Responses were analyzed for content and coded into the following categories: (a) classroom activities (observation of classroom teacher, observation of other teacher, noninteractive routine, interactive routine, preparation or planning, individual teaching, small group teaching, large group teaching); (b) interaction with cooperating teachers (no interaction, social conversation, general education discussion, individual students, teaching/management, planning or preparation, student teaching performance); (c) interaction with students (no interaction, social conversation, classroom routine, individual, small group, full group). In analyzing the data, split-half reliability was determined to be high. The t-test using a pooled variance formula was used for all comparisons to accommodate differences in group size.

Findings indicated that student teachers assigned to trained cooperating teachers were significantly more involved with students and received more feedback from their cooperating teachers than did their counterparts. For example, the percentage of occasions in which student teachers engaged in full

group teaching during the first half of the semester was significantly higher for those placed with trained cooperating teachers. In addition, they spent more time preparing and planning and interacted more with students in both teaching and nonteaching activities than did students placed with untrained cooperating teachers. At the same time, there was a high percentage of no interaction with students reported by student teachers placed with untrained cooperating teachers. Based on these findings, the authors concluded that the training of cooperating teachers does appear to have a positive influence on the early field experiences of student teachers (McIntyre & Killian, 1987).

Together, the three studies of reconceptualized models of student teacher supervision (Boyan & Copeland, 1974; McIntyre & Killian, 1987; Morris, 1974) provide little information for teacher educators. Only one investigator (Morris) employed an experimental design to compare outcomes for student teachers with and without a university supervisor. McIntyre and Killian are the only researchers to have examined the effects of trained cooperating teachers on student teaching experiences. The only other study (i.e., Boyan & Copeland, 1974). addressing reconceptualized models of supervision reported in the literature focused on field-testing of training materials for cooperating teachers.

## Professional Development School Model

By the early 1980s, concern with the quality of education extended to higher education and teacher education (Holmes Group, 1986). Focus shifted away from traditional teacher education programs and university supervision of field-based experiences and toward teacher education restructuring efforts centering around university-school collaboration (Sedlak, 1987). In 1983, a number of university vice-presidents and education deans formed the Holmes

Group for the dual purposes of reforming teacher education and reforming the teaching profession. More than a hundred research universities in the United States were invited to join the consortium. The consensus-building deliberations of the Holmes Group culminated in 1986 with the publication of *Tomorrow's Teachers: A Report of the Holmes Group*.

The Holmes Group report outlined five goals: (1) to make the education of teachers intellectually more solid; (2) to recognize differences in teachers' knowledge, skills, and commitment, in their education, certification, and work; (3) to create standards of entry to the profession – examinations and educational requirements – that are professionally relevant and intellectually defensible; (4) to connect institutions to schools; and, (5) to make schools better places for teachers to work, and to learn (Holmes Group, 1986).

The Holmes Group report had harsh words for traditional teacher education programs and field-based experiences. Although graduates typically attributed their success as teachers to their student teaching experience, there were reasons to remain skeptical about widely held claims for the benefits of traditional student teaching experiences (Holmes Group, 1986). Student teaching experiences were neither broad nor deep. Mentor teachers were often chosen by school officials with little understanding of requisite knowledge and skills. University supervision was infrequent. Student teaching was typically limited to a single school and classroom, and to a teacher largely unfamiliar with other aspects of the teacher education program. The student teaching experience rarely built on general principles and theories emphasized in university coursework. Student teachers were found to quickly conform to practices of their cooperating teacher, rarely trying novel approaches or taking

risks. "Student teachers succeed because they relinquish the norms of professional colleges of education without a struggle. . . . The emphasis is upon imitation of and subservience to the supervising teacher, not upon investigation, reflection, and solving novel problems" (p. 55).

The report recommended that university faculty and clinical faculty from cooperating schools reexamine contemporary pedagogical offerings to produce articulate, coherent curriculum with intellectual integrity. They recommended student teaching experiences in multiple sites with students of diverse ability, motivation, and cultural background (Holmes Group, 1986).

Recognizing the interdependence of teaching and teacher education, the Holmes Group (1986) advocated Professional Development Schools, the analogue of medical education's teaching hospitals. Professional Development Schools would bring practicing teachers and administrators together with university faculty in partnerships that would improve teaching and learning. They would provide opportunity for teachers and administrators to influence development of their profession, and for university faculty to increase the relevance of their professional work through (1) mutual deliberation on problems with student learning, along with possible solutions; (2) shared teaching in university and schools; (3) collaborative research on the problems of educational practice; and (4) cooperative supervision of prospective teachers and administrators.

> The concept of Professional Development Schools assumes that improving teaching ultimately depends on providing teachers with opportunities to contribute to the development of knowledge in their profession, to form collegial relationships beyond their immediate working environment, and to grow intellectually as they mature professionally. The idea of such collaborative sites also recognizes that university-based research and instruction in education must have strong

> roots in the practice of teaching if they are to maintain their intellectual vitality and its credibility with the profession. Professional Development Schools, then, would provide a structured partnership for developing the teaching profession and ultimately improving students' learning. (p. 56)

Professional Development Schools are intended to link universities and school systems in the common cause of improving knowledge about teaching, training new teachers, and developing more effective instructional approaches (Darling-Hammond, 1987). Because Professional Development Schools are the conceptual link between school restructuring and teacher education reform, it is logical that they should be developed and governed collaboratively by universities and schools, classroom teachers and university faculty (Levine, 1992). Appropriate education for student teachers can only be provided in school environments that support and encourage reflection and research and that are committed to the education of teachers. Yet, schools and universities hold different views of the purposes of student teaching experiences.

The fit between schools and traditional university teacher education programs is problematic (Levine, 1992). On the one hand, the university is grounded in academic theory and applied research. On the other hand, reflective classroom practice is grounded in inquiry in action. Reflective classroom teaching relies on the knowledge base provided by the university, yet the structure and culture of the university conflict with the characteristics of reflective practice. As Johnston (2000) described the experience, "Working in PDSs often make us feel schizophrenic. We move back and forth adjusting our psychologies to the differences in expectations, relationships, and reward systems" (p. 8).

The effect on teacher education programs by long-term involvement with Professional Development Schools (PDS) was examined by Teitel in 1997. PDS partnerships that were begun in the mid-1980s were studied in 1990, and then revisited 5 years later. Professional Development School advocates such as Goodlad and the Holmes Group predicted potential for simultaneous renewal for both schools and universities through collaboration.

In the initial study of participating Professional Development Schools in 1990, Teitel concluded that there were significant changes in approach and philosophy, as well as changes in attitudes of university faculty members. Student teachers were placed on teams with collaborative supervision. University faculty members had assumed expanded roles at school sites and were spending more time building deeper relationships with school faculty, sometimes offering mini-courses on site, working with and drawing on the expertise of the teachers. Cooperating teachers were co-teaching, and in some cases, teaching university courses in the teacher education program. Teitel concluded that however distinctive these changes were, they coexisted with the more traditional approaches to student teaching and had only limited effect in changing teacher education approaches.

Teitel (1997) cited several reasons for lack of impact on teacher education programs. First, the organizational structure of the PDS and its off-campus activities tended to isolate participants from mainstream campus-based activities. Second, the tendency to identify PDS as a special project marginalized both efforts and participants. Together, these factors contributed to an out-of-sight, out-of-mind arrangement. Third, there was no readily available discussion forum to connect university and school. Finally, efforts to

implement a collaborative approach in a traditional student teaching placement program were met with resistance by both faculty members and non-PDS student teachers.

Five years later, Teitel (1997) concluded that the most dramatic changes had occurred in the initial stages of PDS implementation. The next 5 years led to some subtle refinements due primarily to maturation of the relationships between school and university. There was greater understanding on the part of cooperating teachers, and also greater involvement of university supervisors in the school. Both factors contributed to enhancing the experience for student teachers.

One major change over time was in the role of the university supervisor. As relationships deepened and matured over a period of years, university faculty members began spending considerably more time in the school. University supervisors found reward both in increased personal connection within the school and in extra course load reduction granted by the university to compensate for increased time spent at the school site. Student teachers benefited from the closer collaboration between university supervisors and cooperating teachers. Teitel (1997) concluded that Professional Development Schools are the key to simultaneous renewal of both institutions, but run the risk of plateauing after 4 or 5 years.

The Professional Development School model outlined in *Tomorrow's Teachers* offered an ambitious agenda for reform in teaching, in teacher education, and within individual institutions (Zumwalt, 1987). Reform of teacher education and restructuring of the teaching profession are very different kinds of educational reform (Soltis, 1987). Such reform is based on two assumptions:

first, that the best educator is one who is best educated, and second, that the best professional is one who is permitted and encouraged to use expert knowledge and skill autonomously in the intelligent and responsible delivery of high-level services. These assumptions constituted the main themes addressed by the Holmes Group in their call for the Professional Development School model.

Darling-Hammond (1992) defined the organizing structure of a professional practice school as one that seeks, transmits, and uses knowledge as a basis for teaching decisions, that supports inquiry and consultation, and that maintains primary concern for student welfare. Furthermore, professional practice schools must be structured to provide opportunities for teachers to reflect critically on their practices, fashion new knowledge and beliefs, and focus on pedagogy and learners (Darling-Hammond, 1995). Professional practice schools are faced with the dilemma of guaranteeing adequate preparation for preservice and novice teachers while at the same time guaranteeing the use of appropriate teaching practices for all children. Schools must meet the challenge of safeguarding the welfare of students while at the same time facilitating the learning of novice teachers.

Successful collaboration between school and university will likely result in professional practice schools that resemble new institutions with new roles and responsibilities (Neufeld, 1992). Traditionally, school/university collaboration has been driven by the college of education. Efforts have been made to involve teachers more closely with campus-based programs, to suggest or assign activities and requirements to be carried out in the classroom, and to increase the skill and frequency with which cooperating teachers provide

learning opportunities for their student teachers which are congruent with program goals. As such, traditional collaborative efforts have required little or no reform on the part of colleges of education because roles and authority remain fundamentally unchanged. In contrast, professional practice schools would require significant changes in roles, relationships, ideas about teaching practices and teacher education, and the organizational structure of authority. Professional practice schools present new challenges because they require a fundamental shift in the concept of teaching practices. The professional practice school will be a new institution (Neufeld, 1992).

## Summary

### Study Characteristics

An intensive and extensive review of the literature relevant to university supervisory practices suggests that university supervision is often written about but seldom studied. The point is illustrated by the fact that although a literature search for the years since 1963 yielded 523 citations, only 38 were determined to be relevant, and of those, only 11 were actual studies. It is also apparent that supervisory practice has not been a topic of recent research. Of the 11 studies of supervisory practice published over the past 30 years, two (Bennie, 1964; Yee, 1968) were published in the 1960s, four (Seperson & Joyce, 1973; Boyan & Copeland, 1974; Morris, 1974; Karmos & Jacko, 1977) were published in the 1970s, five (Zimpher et al., 1980; Johnson, 1986, 1987; McIntyre & Killian, 1987; Richardson-Koehler, 1988) in the 1980s, and none in the 1990s.

### Research Methodology

In their studies of supervisory practices, investigators have employed a variety of research methodologies. Of the 11 studies reviewed, 3 (Zimpher et

al., 1980; Johnson, 1987; Richardson-Koehler, 1988) were qualitative and 8 (Bennie, 1964; Yee, 1968; Seperson & Joyce, 1973; Boyan & Copeland, 1974; Morris, 1974; Karmos & Jacko, 1977; Johnson, 1986; McIntyre & Killian, 1987) were quantitative.

Qualitative studies. Zimpher et al. (1980), Johnson (1987), and Richardson-Koehler (1988) employed qualitative methodologies. Data were collected using ethnographic techniques and analyzed through content analysis.

Quantitative studies. Of the eight quantitative studies, only three were experimental designs. Morris (1974) tested two null hypotheses by randomly assigning 96 student teachers to experimental and control groups. A Lindquist Type I design, 2x3 repeated measures analysis of variance (ANOVA) procedure was used to analyze the data from one variable, while a one-tailed t-test was used to analyze data from the second dependent measure.

Unlike Morris (1974), McIntyre and Killian (1987) were unable to use random assignment to create equal numbers of subjects in their control (n=25) and experimental (n=11) groups. To accommodate differences in group size, McIntyre and Killian used a pooled variance formula for all comparisons. Data were analyzed using one-tailed t-tests.

Boyan and Copeland (1974) used a Solomon Four-Group research design to analyze pre- and posttest data on 76 experimental and 31 control group participants. Homogeneity of groups was controlled. Test-retest reliability yielded a mean Pearson correlation coefficient (r) of .99.

Of the remaining five quantitative studies, two (Bennie, 1964; Karmos & Jacko, 1977) employed survey techniques, and two (Yee, 1968; Johnson, 1986)

used inventories and questionnaires. The fifth study (Seperson & Joyce, 1973) examined partial correlations.

Research Trends

In reviewing and summarizing research methodologies and designs of these 11 studies, two interesting trends emerge. First, only Johnson (1987) conducted a longitudinal study. Second, there appears to be a relationship between the topic of investigation and the research methodology employed. For example, there were three studies of reconceptualized models of student teaching supervision (Boyan & Copeland, 1974; Morris, 1974; McIntyre & Killian, 1987), and all three used experimental designs. No other studies reviewed in Chapter 2 used experimental designs. Likewise, all three studies investigating the sources of influence on student teachers were quantitative (Seperson & Joyce, 1973; Karmos & Jacko, 1977; Johnson, 1986). Of the three studies investigating the benefits of effective university supervision, two were qualitative (Zimpher et al., 1980; Johnson, 1987); only Bennie's (1964) was not.

Research Themes

Studies of supervisory practice published over the past 30 years have tended to investigate four broad aspects of university supervision: (a) documentation and examination of the benefits of university supervision, (b) identification and examination of barriers to effective university supervision, (c) determination and investigation of sources of influence on student teachers, and (d) testing restructured or reconceptualized models of student teacher supervision. Overall, findings have been inconsistent and inconclusive.

Studies investigating benefits of university supervision. Three studies, spanning nearly three decades, have addressed benefits of university

supervision of student teachers. Bennie (1964) documented benefits of university supervision by surveying 171 first-year teachers. When asked to recall their student teaching experience and make judgments about the amount of help they received from their university supervisor and cooperating teacher, 61% of the respondents reported receiving "great help" from their university supervisor, while 57% reported receiving "great help" from their cooperating teacher. When asked about receiving "some help," 30% credited their university supervisor, while 27% credited their cooperating teacher. Bennie concluded that the amount of supervisory help from both sources was approximately the same, with university supervisors being credited with slightly more help than cooperating teachers.

Later studies examined the roles (Zimpher et al., 1980) and behaviors (Johnson, 1987) characteristic of effective university supervisors. In a qualitative study seeking to learn what each member of the student triad was doing during the student teaching experience, and to what end, Zimpher et al. concluded that the university supervisor (a) was responsible for setting requirements, evaluating, and assessing the student teacher's field-based experience, (b) enhanced informational communication among members of the student teaching triad, and (c) was the only one to make critical contributions to the student teacher's progress.

Similarly, in a longitudinal study to determine student teachers' perceptions of effective supervisory behaviors, Johnson (1987) concluded that, in general, student teachers perceived supervision to be most beneficial when it was evaluative, supportive, and provided suggestions for improvement.

Together, these three studies merely document the perceived helpfulness of university supervisors and describe roles and behaviors characteristic of effective university supervisors. Data are too limited to be conclusive.

Studies investigating barriers to effective university supervision. Two studies, 20 years apart, examined barriers to effective university supervision of student teachers. In a study of 124 student teaching triads, Yee (1968) examined trends and shifts in triadic relationships over the course of the student teaching semester and found that, over time, negative shifts tended to occur between student teachers and university supervisors while the relationships between student teachers and cooperating teachers tended to remain positively balanced. Yee (1968) concluded that student teaching triads sought greater dyadic balance at the cost of triadic cohesiveness and, further, that student teaching triads provided little opportunity and purpose for meaningful triadic relationship.

Later, Richardson-Koehler (1988), suspecting that unidentified factors might account for university supervisors' low impact on student teaching performance, examined underlying assumptions about how teachers learn to teach. In her study of 14 student teaching triads, Richardson-Koehler found that within the first 2 weeks of the field-based experience, student teachers were discounting previous knowledge from coursework and were learning to teach through the experience of teaching rather than relying on models of rigorous analysis of teaching. Richardson-Koehler identified the following barriers to effective university supervision: (a) any criticism of student teaching offered by the university supervisor was potentially a criticism of the cooperating teacher;

(b) cooperating teachers tended to defend student teachers from the criticisms of university supervisors; and (c) university supervisors, caught between demands of the university and the school setting, lacked sufficient time to build the trust necessary to function effectively within the student teaching triad. Richardson-Koehler concluded that given the structure and context of the school environment, university supervisors' influence is questionable.

Both studies (i.e., Yee, 1968; Richardson-Koehler, 1988) suggest that cooperating teachers develop a stronger relationship with student teachers than do university supervisors. Furthermore, it appears that university supervisors tend to become odd-man-out in the triadic relationship. The structure and context of field-based experiences may give rise to numerous barriers to effective university supervision.

Studies investigating sources of influence. Three studies addressed sources of influence on student teachers. Karmos and Jacko (1977) and Johnson (1986) sought to identify persons and events that influenced field-based experiences. Seperson and Joyce (1973) tracked the relationship between cooperating teachers' and student teachers' teaching behaviors over time.

To identify significant persons and events as sources of influence on student teachers, Karmos and Jacko (1977) surveyed 60 student teachers, asking them to list the five most influential persons and events in their field-based experience. More than half of the student teachers cited their cooperating teachers as being most influential.

In a similar study, Johnson (1986) also found that student teachers most often cited their cooperating teacher as being most influential. However,

Johnson (1986) was surprised to find that student teachers also frequently identified a major professor and children in the classroom as having significant influence on their student teaching experience.

Seperson and Joyce (1973) took a different approach to identifying sources of influence on student teachers, establishing correlations between teaching behaviors of cooperating teachers and student teachers over the course of the student teaching semester. They found no correlations prior to placement but did find correlations shortly after student teaching began. Those correlations continued over time.

Together, these three studies clearly establish the influence of cooperating teachers on student teachers. While other sources of influence were documented, the cooperating teacher emerged as the source of influence most frequently cited by student teachers.

Studies investigating reconceptualized models of supervision. Three studies of reconceptualized models of student teaching supervision have been reported in the literature. Each study is very different in nature: Morris (1974) investigated the effects of eliminating the university supervisor's role; McIntyre and Killian (1987) examined the effects of training cooperating teachers in supervisory practices; while Boyan and Copeland (1974) field tested training materials for cooperating teachers.

In the only empirical investigation of university supervision of student teachers, Morris (1974) compared (a) teaching performance and (b) adjustment of 96 student teachers with and without university supervision. Using analysis of variance, Morris found no difference in the teaching performance of student teachers who did and did not have university supervision. Further testing of a

significant interaction revealed that student teachers with university supervision perceived themselves to be performing better than did student teachers without university supervision. No differences were found on any measures of student teacher adjustment. Although Morris found no significant differences in teaching performance of student teachers with and without university supervision, she recommended that the role of university supervisors should be maintained, primarily to serve as a liaison between school and university personnel and to provide feedback to colleges of education.

McIntyre and Killian (1987) examined the effectiveness of training cooperating teachers in effective supervisory practices by measuring and comparing field-based experiences of student teachers (n=36) placed with trained (n=11) and untrained (n=25) cooperating teachers. They found that student teachers assigned to trained cooperating teachers were significantly more involved with students in the classroom, received more feedback, and spent more time planning and teaching than did student teachers assigned to untrained cooperating teachers. McIntyre and Killian concluded that training cooperating teachers does have a positive influence on field-based experiences.

Boyan and Copeland (1974) reported field test results of training materials for cooperating teachers. Materials were field tested at nine sites nationwide with 76 cooperating teachers in the experimental group and 31 cooperating teachers in the control group. Boyan and Copeland reported that their training materials were effective in improving cooperating teachers' skills in observing, analyzing, prescribing, and counseling during the field-based experience.

Very little research on reconceptualized models of student teaching supervision has been reported in the literature. McIntyre and Killian (1987) documented the effectiveness of training cooperating teachers in effective supervisory practices, while Boyan and Copeland (1974) reported on the effectiveness of their training materials. In a key study, Morris (1974) investigated the effects of eliminating the role of university supervisors and found no differences in either teaching performance or adjustment of student teachers with and without university supervision.

Conclusions and Implications of Research Findings

Given the dearth of research on university supervision of student teachers over the past 30 years, it is difficult to draw any conclusions about benefits or practices. Benefits have been documented (Bennie, 1964); roles (Zimpher et al., 1980) and behaviors (Johnson, 1987) of effective university supervisors have been identified; and barriers (Yee, 1968; Richardson-Koehler, 1988) to effective university supervision have been examined. Relationships (Seperson & Joyce, 1973) and people and events (Karmos & Jacko, 1977; Johnson, 1986) have been examined as sources of influence on student teachers. Training materials (Boyan & Cropland, 1977) for improving cooperating teachers' skills in supervision (McIntyre & Killian, 1977) have been reported. Yet, only one researcher (Morris, 1974) has investigated alternative models of supervision by comparing the teaching performance and adjustment of student teachers with and without university supervision. Bennie's (1964) observation that "the campus supervisor of student teaching is generally accepted as an important factor in the student teaching experience, but little has

been done to analyze the effectiveness of the supervisory function" (p. 131) is as relevant today as it was 30 years ago.

Several factors point to the dire need for further research on university supervision of student teachers, and especially to the need for carefully considered experimental design research examining the effectiveness of alternative methods of university supervision. With only three disparate studies spanning as many decades, findings on the benefits of university supervision are inconsistent and inconclusive. Likewise, surprisingly few empirical studies on the barriers to effective university supervision exist. The existing studies raise disconcerting concerns about triadic relationships and about the possibility that the structure and context of field-based experiences may actually present barriers to effective university supervision. Although there is a paucity of research on the sources of influence on student teachers, findings of those few studies suggest that cooperating teachers are most influential.

Most importantly, very little research on reconceptualized models of student teaching supervision has been reported in the literature. Twenty-five years ago, in the only study utilizing experimental design, no differences were found in outcomes for student teachers with and without university supervision. Therefore, the need for contemporary research on the effectiveness of alternative models of university supervision of student teachers is critical.

In the following chapter, research methodology for this study is described. Results are reported in Chapter 4, and conclusions and implications are discussed in Chapter 5.

# CHAPTER 3
# METHODOLOGY

Findings of research on student teacher supervision have been characterized as disquieting, conflicting, and inconclusive. Calls for reconceptualization and restructuring of student teacher supervision have been persistent and have remained relatively unchanged over the past 20 years. Closer examination of reconceptualized and restructured models of student teacher supervision is warranted. The purpose of this study was to compare student teaching outcomes for interns who received traditional university supervision with interns who received alternative student teaching supervision during their semester of full-time teaching.

In Chapter 3, the research methodology used in this study of university supervision of student teachers is described. This chapter includes subject and setting descriptions, informed consent procedures, treatment protocols, hypotheses, research questions, instrumentation, procedures, and experimental design and analysis.

## Subjects

### Interns

Of the 35 special education interns from the University of Florida who were fulfilling their full-time student teaching requirement during Fall semester, 1994, 34 participated in the study. All had completed their undergraduate degree in special education through the PROTEACH Program at the University of Florida and had completed 300 hours of practica during their undergraduate program. Of the 34 interns, 31 were seeking certification and a master's

degree, while three were completing certification requirements but not seeking a master's degree. Interns were seeking certification in the following areas of exceptionality: learning disabilities (26), physical impairments (5); emotional handicaps (19), and mental handicaps (15). Two interns were also completing requirements for early childhood endorsement.

Cooperating Teachers

Of the 35 cooperating teachers who supervised University of Florida special education interns during Fall semester, 1994, 34 participated in the study. Cooperating teachers' participation in the PROTEACH Program was on a voluntary basis. In return, cooperating teachers received a tuition voucher from the university. Cooperating teachers were required to have taught for at least 3 years. They ranged in classroom teaching experience from 3 to 28 years. Their experience as cooperating teachers ranged from no semesters to over 10 years. None of the cooperating teachers had previous experience with alternative models of student teacher supervision.

University Supervisors

All nine university supervisors employed by the special education department at the University of Florida during Fall semester, 1994, participated in the study. Of the nine university supervisors, six were doctoral students and three were faculty members. All had classroom teaching experience, ranging from 2 to 18 years. They ranged in supervisory experience from no semesters to over 25 years. All had completed orientation and training sessions provided by the department of special education prior to the beginning of the semester. Two had completed additional professional preparation in student teacher supervision. None of the university supervisors had previous experience with alternative models of university supervision. Refer to Table 1 for summary of subject characteristics.

Table 1

Characteristics of Student Teaching Participants

| Characteristic | Supervision | |
|---|---|---|
| | Traditional | Alternative |
| Interns | n=17 | n=17 |
| Gender | | |
| Male | 2 | 3 |
| Female | 15 | 14 |
| Ethnicity | | |
| White, Non-Hispanic | 13 | 17 |
| African-American | 0 | 0 |
| Hispanic | 1 | 0 |
| Asian/Pacific Islander | 1 | 0 |
| Native American | 0 | 0 |
| Other | 2 | 0 |
| Certification | | |
| with Master's degree | 15 | 16 |
| without Master's degree | 2 | 1 |
| Areas of certification | | |
| Learning Disabilities | 14 | 12 |
| Physical Impairments | 2 | 3 |
| Emotional Handicaps | 10 | 9 |
| Mental Handicaps | 7 | 8 |
| Early Childhood Endorsement | 1 | 1 |

Table 1--continued

| Characteristic | Supervision | |
|---|---|---|
| | Traditional | Alternative |
| Cooperating Teachers | n=17 | n=17 |
| Gender | | |
| Male | 2 | 0 |
| Female | 15 | 17 |
| Ethnicity | | |
| White, Non-Hispanic | 15 | 14 |
| African-American | 1 | 2 |
| Hispanic | 0 | 0 |
| Asian/Pacific Islander | 0 | 0 |
| Native American | 0 | 0 |
| Other | 1 | 1 |
| Areas of certification | | |
| Learning Disabilities | 9 | 7 |
| Physical Impairments | 2 | 0 |
| Emotional Handicaps | 6 | 9 |
| Mental Handicaps | 10 | 11 |
| Early Childhood | 2 | 1 |
| Varying Exceptionalities | 3 | 3 |
| Hard-of-Hearing/Hearing Impaired | 0 | 1 |
| Elementary | 4 | 2 |
| Gifted | 1 | 0 |
| Experience as Classroom Teacher | | |
| 0-3 years | 1 | 1 |
| 4-10 | 2 | 3 |
| 11-19 | 8 | 10 |
| 20+ | 6 | 3 |
| Experience as Cooperating Teacher | | |
| 0 semesters | 2 | 5 |
| 1-2 semesters | 4 | 1 |
| 3-5 semesters | 4 | 5 |
| 6+ semesters | 7 | 6 |
| Experience with Models of Supervision | | |
| Traditional | 17 | 17 |
| Alternative | 0 | 0 |

Table 1--continued

| Characteristic | Supervision (Mixed) |
|---|---|
| University Supervisors | n=9 |
| Gender | |
| Male | 2 |
| Female | 7 |
| Ethnicity | |
| White, Non-Hispanic | 8 |
| African-American | 1 |
| Hispanic | 0 |
| Asian/Pacific Islander | 0 |
| Native American | 0 |
| Other | 0 |
| Areas of certification | |
| Learning Disabilities | 5 |
| Physical Impairments | 0 |
| Emotional Handicaps | 2 |
| Mental Handicaps | 3 |
| Early Childhood | 1 |
| Varying Exceptionalities | 1 |
| Speech/Language/Hearing | 3 |
| Deaf/Blind | 1 |
| Visual Impairments | 1 |
| Elementary | 4 |
| Gifted | 1 |
| Adult Education | 2 |
| Status | |
| Doctoral Student | 6 |
| Faculty Member | 3 |
| Experience as Classroom Teacher | |
| 0-3 years | 2 |
| 4-10 | 4 |
| 11-19 | 3 |
| 20+ | 0 |

Table 1--continued

| Characteristic | Supervision (Mixed) |
|---|---|
| University Supervisors | n=9 |
| Experience as University Supervisor | |
| 0 semesters | 5 |
| 1-2 semesters | 1 |
| 3-5 semesters | 1 |
| 6+ semesters | 2 |
| Preparation as University Supervisor | |
| Department Orientation/Training Only | 7 |
| Additional Professional Preparation | 2 |
| Experience with Models of Supervision | |
| Traditional | 9 |
| Alternative | 0 |

## Settings

All interns were placed in public schools within a 35-mile radius of the University of Florida, encompassing four county school districts. Of the 34 classrooms, 19 were part-time resource rooms, 14 were self-contained classrooms, and 1 was an inclusive regular classroom. None were in center schools. Two of the placements were in prekindergarten classrooms in regular elementary school, 19 were in elementary schools, 7 were in middle schools, and 6 were in high schools. Classrooms served students with physical impairments (PI), learning disabilities (LD), emotional handicaps (EH), hearing impairments (HI), mental handicaps (MH), and varying exceptionalities (VE). Twenty-two of the placements were in schools located in a small city (i.e., population of approximately 100,000), while 12 placements were in schools located in rural communities. For a summary of setting characteristics, refer to Table 2.

## Research Design

At the time of this study, all special education internship placements were made by the University of Florida, Office of Extended Services, following routine and customary placement procedures. Internship placement decisions were based on the student teachers' grade level preference and area of certification (i.e., category of disability), and on availability of cooperating teachers and classrooms to meet those requirements. After internship placements were made, participating interns and their cooperating teachers were stratified on two levels and then randomly assigned to one of two treatment groups (i.e., traditional university supervision or alternative student teacher supervision). First, to ensure even distribution across treatment groups of cooperating teachers with and without prior experience in intern supervision, cooperating teachers were stratified according to whether or not they had previous

experience supervising special education PROTEACH interns from the University of Florida. Second, to ensure even distribution of classroom settings and age ranges, cooperating teacher-intern dyads were stratified according to age/grade level of their classroom (i.e., pre-kindergarten, elementary, middle, high school). Following the two levels of stratification, intern-cooperating teacher dyads were randomly assigned to either traditional or alternative treatment groups.

Table 2

Characteristics of Student Teaching Settings

| | Supervision | |
|---|---|---|
| Characteristic | Traditional n=17 | Alternative n=17 |
| Type of Classroom | | |
| Part-time Resource Room | 9 | 10 |
| Self-contained Classroom | 8 | 6 |
| Regular Classroom/Inclusive | 0 | 1 |
| Grade Level Placement | | |
| Pre-kindergarten | 1 | 1 |
| Elementary | 9 | 10 |
| Middle School | 4 | 3 |
| High School | 3 | 3 |
| Category of Disability | | |
| Learning Disabilities | 1 | 2 |
| Physical Impairments | 0 | 0 |
| Emotional Handicaps | 0 | 0 |
| Mental Handicaps | 3 | 2 |
| Varying Exceptionalities | 11 | 10 |
| Hearing Impairments | 0 | 1 |
| Community-Based Training | 2 | 1 |
| Inclusive Classroom | 0 | 1 |
| Geographic Location | | |
| Small City | 14 | 8 |
| Rural Community | 3 | 9 |

University supervisors were not randomly assigned to supervisory method; instead, standard policies for the department of special education were followed in assigning university supervisors to interns. Assignments were made based on the supervisor's area of expertise (i.e., category and severity of disability, age/grade level, curriculum). Additionally, in an effort to provide continuity both within schools and within intern seminar groups, whenever feasible, university supervisors were assigned to all interns placed at a given school. Thus, university supervisors were likely, by chance, to be supervising interns in both the traditional and alternative groups.

This study consisted of two research components: (a) a quantitative comparison of scores on repeated measures of teaching performance for the two groups of interns (i.e., traditional versus alternative university supervision) and (b) qualitative analysis of interviews with interns, cooperating teachers, and university supervisors to determine the benefits and disadvantages of each model of university supervision.

The remaining sections of Chapter 3 address procedures for obtaining informed consent of participants, and protocol for the two treatment groups. Hypotheses, research questions, instrumentation, procedures, and experimental design and analysis are described.

Informed Consent

All potential participants were fully informed of the purposes and procedures of the study during their orientation sessions, prior to beginning internship placements. Information was presented both orally and in a written letter of informed consent. Although information was presented in separate sessions, the presentation of that information was identical for each group of participants. Each participant received two copies of the letter of

informed consent--one to sign and return and one to keep for personal reference.

Interns and cooperating teachers. At the beginning of the semester, prior to the student teachers beginning their classroom placements, separate orientation sessions were held for cooperating teachers and interns. During the orientation sessions, the Internship Program Coordinator from the department of special education at the university reviewed and discussed special education internship requirements and assignments, as well as university policies and procedures, as described in the student teaching handbook. Internship requirements and assignments and university policies and procedures applied to both treatment groups and remained unchanged from previous semesters. In addition, the Internship Program Coordinator explained that during Fall semester, 1994, an alternative and traditional approach to student teacher supervision would be implemented simultaneously. Routines and procedures were described, and responsibilities for cooperating teachers, interns, and university supervisors were explained for each of the two treatment groups. Interns and cooperating teachers were informed that a study was being conducted to investigate the effectiveness and to gain a better understanding of the strengths and weaknesses of both approaches. Findings would inform teacher educators about how to improve university supervision of student teachers. It was explained that if they chose to participate, interns and their cooperating teachers would be randomly assigned to one of the two groups. Those who chose not to participate would be dropped from study conditions and provided with traditional university supervision. Voluntary participants were given a letter of informed consent to read and sign. At the same time, they were asked to complete a brief form providing demographic information.

University supervisors. Orientation sessions for university supervisors were held separately, prior to the beginning of the semester. During the orientation sessions, the Internship Program Coordinator from the department of special education at the university reviewed and discussed special education internship requirements and assignments as well as university policies and procedures, as described in the student teaching handbook. It was explained that during Fall semester, 1994, an alternative and traditional approach to student teacher supervision would be implemented simultaneously. Routines and procedures were described, and responsibilities for cooperating teachers, interns, and university supervisors were explained for each of the two treatment groups. University supervisors were informed that a study was being conducted to examine the effectiveness, strengths, and limitations of each approach to student teacher supervision. The coordinator explained that if they chose to participate, they would be assigned to supervise interns who had been randomly assigned to treatment groups. If they chose not to participate, they would be dropped from study conditions and assigned to traditional university supervision. Voluntary participants were given a letter of informed consent to read and sign. At the same time, they were asked to complete a brief form providing demographic information.

Models of Student Teacher Supervision

Two models of student teaching supervision were implemented simultaneously during Fall semester, 1994. The "traditional" model, in which university supervisors assumed an active role in the classroom supervision of interns, remained unchanged from previous semesters. In the "alternative" model, cooperating teachers assumed primary responsibility for classroom supervision of interns. Details of the traditional and alternative models are presented in Table 3.

Table 3

Comparison of Models of Student Teacher Supervision

| Model | |
|---|---|
| Traditional | Alternative |
| University supervisors are directly involved with interns and cooperating teachers in classes. | University supervisors are not directly involved with interns and cooperating teachers in classes. |
| University supervisors and cooperating teachers assume separate roles for classroom supervision of interns. | Cooperating teachers assume primary responsibility for classroom supervision of interns. |
| University supervisor makes four to six classroom visits to observe intern's teaching, conferences with intern, provides feedback on lesson, addresses concerns, and plans future teaching experiences. If possible, university supervisor then conferences with cooperating teacher, checks on intern's progress, addresses concerns, and discusses plans for additional teaching experience. | Cooperating teachers are responsible for observing their intern's teaching, providing feedback on lesson, addressing concerns, planning for future teaching experiences, and then providing frequent written feedback to the university about their intern's progress. |
| Two videotapes are to be submitted to university supervisor by intern, accompanied by intern's written self-critique. Supervisor will review and provide written feedback to intern. | At least two videotapes are to be submitted to university supervisor by intern, accompanied by intern's written self-critique and written feedback from cooperating teacher. Supervisor will review for purpose of quality control, but will not provide written feedback to intern. |

Table 3--continued

| Model | |
|---|---|
| Traditional | Alternative |
| At midterm, a three-way conference is held to jointly discuss interns' progress and set goals for remainder of semester. | At midterm, a three-way conference is held to jointly discuss interns' progress and set goals for remainder of semester. |
| Each university supervisor assigned to five or six interns and their cooperating teachers. | Each university supervisor assigned five or six interns. |
| University supervisors are responsible for assuring that student teaching requirements are met, assignments are completed, policies and procedures are followed, conflicts are resolved, and paperwork is completed. | University supervisors are responsible for assuring that student teaching requirements are met, assignments are completed, policies and procedures are followed, conflicts are resolved, and paperwork is completed. |
| University supervisors are responsible for meeting with interns for biweekly seminars. | University supervisors are responsible for meeting with interns for biweekly seminars. |
| In the event of problems, university supervisors interact directly with interns and cooperating teachers as needed. | In the event of problems requiring direct classroom involvement, Internship Program Coordinator intervenes. |

Protocol for Supervision of Student Teachers

Procedures for traditional and alternative methods of student teacher supervision were discussed in detail with cooperating teachers, university supervisors, and interns. All participants were instructed to follow stated procedures carefully and to call the Internship Program Coordinator if there were questions, concerns, or special considerations. Participants were reminded not to deviate from procedures and not to do anything out of the ordinary just because they were study participants.

Traditional university supervision. In the traditional model of student teacher supervision, university faculty members or doctoral students were directly involved with interns and cooperating teachers in classroom practice. Typically, each university supervisor was assigned to five or six interns and their cooperating teachers. During the course of the semester, the university supervisor made four to six classroom visits to observe the intern teaching. Following each observation, the university supervisor conferenced with the intern, providing feedback on the lesson, addressing concerns, and planning future teaching experiences. Whenever possible, the university supervisor then conferenced with the cooperating teacher, checking on the intern's progress, addressing concerns, and discussing plans for additional teaching experience. At midterm, a three-way conference was scheduled at a time when the university supervisor, intern, and cooperating teacher could jointly discuss the intern's progress and set goals for the remainder of the semester.

In addition to classroom observations, conferences, and evaluations, university supervisors were responsible for meeting with interns for biweekly seminars. Interns in the traditional and alternative groups attended seminars together. The informal atmosphere of seminar was intended to provide an

opportunity for interns to examine and reflect on their teaching practices and to connect university coursework with classroom practice. The role of university supervisors was to guide that process.

In the traditional model of student teacher supervision, university supervisors were also responsible for assuring that student teaching requirements were met, assignments were completed, policies and procedures followed, conflicts were resolved, and paperwork was completed. In those roles, traditional university supervisors interacted directly with interns and cooperating teachers as needed.

Alternative supervision. In the alternative model of student teacher supervision, university faculty members or doctoral students were not directly involved with interns and cooperating teachers in classroom practice. Instead, cooperating teachers assumed primary responsibility for classroom supervision of their interns. Cooperating teachers were responsible for observing the intern teaching, providing feedback on the lesson, addressing concerns, planning for future teaching experiences, and then providing frequent written feedback to the university about the intern's progress.

Typically, each supervisor was assigned five to six interns and was responsible for assuring that student teaching requirements were met, assignments were completed, policies and procedures followed, conflicts were resolved, and paperwork was completed. However, there was no direct involvement in the classroom.

Supervisors were also responsible for meeting with interns for biweekly seminars. Interns in the traditional and alternative groups attended seminars together. The informal atmosphere of the seminar was intended to provide an opportunity for interns to examine and reflect on their teaching practices and to

connect university coursework with classroom practice. The role of university supervisors was to guide that process.

As a measure of quality control and to assure continuity of the internship program across treatment groups, alternative supervisors viewed at least two videotapes submitted by the intern, accompanied by the intern's written self-critique and written feedback from the cooperating teacher. The first videotape, along with the intern's self-critique and the cooperating teacher's written feedback, was due early in the semester so that progress could be monitored and potential problems could be identified early. The second required videotape and paperwork was due at midterm. If there were concerns about the intern's progress, additional videotapes were requested.

At midterm, a three-way conference was scheduled at a time when the university supervisor, intern, and cooperating teacher could jointly discuss the intern's progress and set goals for the remainder of the semester. In addition, university supervisors made phone contact with cooperating teachers in the alternative group two to three times during the semester to answer any questions about paperwork, requirements, or assignments, to offer support, and to maintain open lines of communication between the university and the schools.

In the event of problems requiring direct classroom involvement, the Internship Program Coordinator intervened. At any time during the semester, if it appeared that there were significant unresolved problems, participants had the option of being dropped from the study and being provided with more intensive supervision as necessary. Refer to Table 4 for the timeline of supervisory practices.

Table 4

Timeline of Supervisory Procedures

| Week of Student Teaching | Method of Supervision: Traditional | Method of Supervision: Alternative |
|---|---|---|
| Prior to Placements | University supervisors' orientation and training; informed consent; demographic information collected. | University supervisors' orientation and training; informed consent; demographic information collected. |
| | Cooperating teachers' orientation; review of procedures and protocol; informed consent; demographic information collected. | Cooperating teachers' orientation; review of procedures and protocol; informed consent; demographic information collected. |
| | Intern orientation; requirements, assignments; procedures; protocol; informed consent; demographic information collected. | Intern orientation; requirements, assignments; procedures; protocol; informed consent; demographic information collected. |
| 1st - 2nd | Interns begin full-time placement; become acquainted with classroom routines and students; gradually assume teaching responsibility. | Interns begin full-time placement; become acquainted with classroom routines and students; gradually assume teaching responsibility. |
| | Cooperating teachers guide and support interns in assuming responsibilities, becoming acquainted with students, routines, other teachers, staff, and school environment. | Cooperating teachers guide and support interns in assuming responsibilities, becoming acquainted with students, routines, other teachers, staff, and school environment. |
| | University supervisors are available to clarify procedures, requirements, etc.; visit classroom only in event of problems; no scheduled observations. | University supervisors contact cooperating teachers by telephone to clarify questions, address concerns, check on progress. |

Table 4--continued

| Week of Student Teaching | Method of Supervision: Traditional | Method of Supervision: Alternative |
|---|---|---|
| 2nd - 3rd | Cooperating teachers complete initial evaluation checklists on student teaching performance; forward to university supervisors. | Cooperating teachers complete initial evaluation checklists on student teaching performance; forward to university supervisors. |
| 3rd - 4th | University supervisors make first classroom observation; provide verbal and written feedback; conference with intern and cooperating teacher. | First videotape of intern's teaching due; sent to university supervisor along with written self-critique and cooperating teacher's written feedback. University supervisor reviews; uses written feedback to triangulate conclusions about intern's skills and competencies. No feedback provided by university supervisor. |
| End of 4th | Biweekly evaluation checklists due; completed by cooperating teachers; sent to university supervisors. | Biweekly evaluation checklists due; completed by cooperating; sent to university supervisor. |
| 5th - 6th | University supervisors make classroom observation; provide verbal and written feedback; conference with intern and cooperating teacher. | University supervisors contact cooperating teachers by telephone to clarify questions, address concerns, check on progress. |
| End of 6th | Biweekly evaluation checklists due; completed by cooperating teachers; sent to university supervisors. | Biweekly evaluation checklists due; completed by cooperating teachers; sent to university supervisors. |

Table 4--continued

| Week of Student Teaching | Method of Supervision: Traditional | Method of Supervision: Alternative |
|---|---|---|
| 7th | First videotape of intern's teaching due; sent to university supervisor along with intern's self-critique. University supervisor provides feedback to intern.<br><br>Three-way mid-term conference. | Second videotape of intern's teaching due; sent to university supervisor along with written self-critique and cooperating teacher's written feedback. University supervisor reviews; uses written feedback to triangulate conclusions about intern's skills and competencies. No feedback provided by university supervisor.<br>Three-way mid-term conference. |
| 7th - 8th | University supervisors make classroom observation; provide verbal and written feedback; conference with intern and cooperating teacher. | |
| End of 8th | Biweekly evaluation checklists due; completed by cooperating teachers; sent to university supervisors. | Biweekly evaluation checklists due; completed by cooperating teachers; sent to university supervisors. |
| 8th - 9th | | University supervisors contact cooperating teachers by telephone to clarify questions, address concerns, check on progress. |
| 9th - 10th | University supervisors make classroom observation; provide verbal and written feedback; conference with intern and cooperating teacher. | |

Table 4--continued

| Week of Student Teaching | Method of Supervision: Traditional | Method of Supervision: Alternative |
|---|---|---|
| End of 10th | Biweekly evaluation checklists due; completed by cooperating teachers; sent to university supervisors. | Biweekly evaluation checklists due; completed by cooperating teachers; sent to university supervisors. |
| 11th | Second videotape of intern's teaching due; sent to university supervisor along with intern's self-critique. University supervisor provides feedback to intern. | |
| 11th - 12th | University supervisors make classroom observation; provide verbal and written feedback; conference with intern and cooperating teacher. | |
| End of 12th | Final evaluation checklists due; completed by cooperating teachers; sent to university supervisors. | Final evaluation checklists due; completed by cooperating teachers; sent to university supervisors.<br><br>Follow-up telephone contact by university supervisors with cooperating teachers as necessary. |
| After Completion of Final Evaluations | Interviews with selected triads. | Interviews with selected triads. |

Research Component I: Quantitative Comparison of Student Teaching Performance

Hypotheses. In order to compare the teaching performance of interns who received traditional university supervision with the teaching performance of interns who received alternative student teaching supervision, the following null hypotheses were tested:

$H_1$: There will be no significant differences between scores on measures of seatwork management for interns who received traditional university supervision and those who received alternative student teaching supervision.

$H_2$: There will be no significant differences between scores on measures of instructional management and lesson presentation for interns who received traditional university supervision and those who received alternative student teaching supervision.

$H_3$: There will be no significant differences between scores on measures of time management for interns who received traditional university supervision and those who received alternative student teaching supervision.

$H_4$: There will be no significant differences between scores on measures of classroom management for interns who received traditional university supervision and those who received alternative student teaching supervision.

Instrumentation. In this study, rating scales adapted from Englert, Tarrant, and Mariage (1992) were used to assess interns' teaching effectiveness. Four domains of teaching performance were assessed: (a) seatwork management, (b) instructional management and lesson presentation,

(c) time management, and (d) classroom management. Reliability was determined by obtaining measures of internal consistency.

Cronbach's alpha (Smith & Glass, 1987) was applied to scores on each of the four scales. Seatwork management rating scales contained nine items, on each of six observations, for each of the 34 interns, generating a total of 1,836 scores to be correlated. Instructional management and lesson presentation rating scales contained 27 items, on each of six observations, for each of the 34 interns, generating a total of 5,508 scores to be correlated. Time management rating scales contained 10 items, on each of six observations, for each of the 34 interns, generating a total of 2,040 scores to be correlated. Classroom management rating scales contained 15 items, on each of six observations, for each of the 34 interns, generating a total of 3,060 scores to be correlated.

Using Cronbach's alpha, correlation analysis yielded reliability measures of .96 on seatwork management, .99 on instructional management and lesson presentation, .95 on time management, and .99 on classroom management. Construct validation literature, as reviewed by Englert et al. (1992), is summarized in Appendix A.

Procedures. Six times during the semester, or approximately every other week, each cooperating teacher rated his or her intern on each of the four scales of teaching effectiveness (i.e., seatwork management, instructional management and lesson presentation, time management, and classroom management). (See Appendix B for rating scales.) Cooperating teachers were instructed to rate interns on each item using a 7-point Likert-type scale, with "1" being the lowest (i.e., no evidence of skill), "4" indicating expected competency level for a beginning intern, and "7" indicating competency level expected of a beginning teacher. In an effort to encourage completion of as many items as

possible, cooperating teachers were asked to observe interns in numerous and varied teaching contexts. If, during the course of the 2-week period, there had been no opportunity to observe the intern on a given item, the cooperating teacher was to indicate "no opportunity to observe." Completed forms were forwarded to respective university supervisors. In the event that forms were not completed in a timely manner, university supervisors were to contact their cooperating teachers.

Experimental design and analysis. Scores for each intern were calculated for repeated measures on each of the four rating scales. To determine a score, the numerical ratings for all items on a scale were totaled, then divided by the total number of items, yielding an average numerical rating or score.

A repeated measures analysis of variance (ANOVA) was used to determine if there were any significant differences between treatment groups on rate of professional growth and progress over time. Independent ANOVAs were computed for each of the four rating scales of student teacher performance (i.e., seatwork management, instructional management and lesson presentation, time management, and classroom management). Level of significance was .05.

Research Component II: Qualitative Analysis of Interviews

Research questions. In order to understand the benefits and disadvantages of each model of student teacher supervision, the following questions were investigated:

#1. What do cooperating teachers who participated in the traditional model of intern supervision cite as the benefits or advantages of having a university supervisor directly involved?

#2. What do cooperating teachers who participated in the traditional model of intern supervision cite as the disadvantages or drawbacks of having a university supervisor directly involved?

#3. What do cooperating teachers who participated in the alternative model of intern supervision cite as the benefits or advantages of assuming primary responsibility for intern supervision, rather than having a university supervisor directly involved?

#4. What do cooperating teachers who participated in the alternative model of intern supervision cite as the disadvantages or drawbacks of assuming primary responsibility for intern supervision, rather than having a university supervisor directly involved?

#5. What do interns who received traditional supervision cite as the benefits or advantages of having a university supervisor directly involved?

#6. What do interns who received traditional supervision cite as the disadvantages or drawbacks of having a university supervisor directly involved?

#7. What do interns whose cooperating teacher assumed primary responsibility for supervision cite as the benefits or advantages of not having a university supervisor directly involved?

#8. What do interns whose cooperating teacher assumed primary responsibility for supervision cite as the disadvantages or drawbacks of not having a university supervisor directly involved?

#9. What do university supervisors who participated in the traditional model of intern supervision consider to be the strengths of their role?

#10. What do university supervisors who participated in the traditional model of intern supervision consider to be the limitations of their role?

#11. What do university supervisors who participated in the alternative model of intern supervision consider to be the strengths of their role?

#12. What do university supervisors who participated in the alternative model of intern supervision consider to be the limitations of their role?

Instrumentation. Research questions for this study were developed from relevant literature on university supervision of student teachers. (Refer to Appendix C for summary of underlying assumptions, supporting literature, and indicators.) Those research questions were then used as a basis for developing interviews for cooperating teachers, interns, and university supervisors in each treatment group. (See Appendix D for interviews.)

The purpose of the initial phase of each interview was to gather demographic information about subjects and settings, as well as information about experience in classroom teaching and student teacher supervision. The remainder of the interview focused on questions about participants' experience with respective models of student teacher supervision. The main purpose of the interview was to gain an understanding of benefits and disadvantages of traditional and alternative models of student teacher supervision. An ethnographic approach to interviewing was employed, mixing descriptive, structural, and contrast questions (Spradley, 1979).

Procedures. During the last week of student teaching, four student teaching triads (i.e., interns, cooperating teachers, and university supervisors) were identified for individual interviews. Two triads that had experienced no problems during the semester and two triads that had encountered problems during the semester were selected. The purpose of the interviews was to gain in-depth understanding of selected individual experiences with each model of student teacher supervision. Interview questions were intended to elicit information about how participants perceived strengths and limitations of each

model. The interviews were not intended to gather surface information across all participants. Therefore, only four triads were interviewed.

In order to ensure that interns would not feel threatened by the prospect of a poor evaluation and to eliminate the possibility of influencing cooperating teachers' evaluations of interns, interviews were not conducted until final evaluations had been completed. Individual interviews were conducted by the researcher. Interviews were audiotaped for two purposes: (a) to ensure that interview protocol was followed and (b) to allow for transcription of interviews.

Analysis. Spradley's (1979) ethnographic research sequence was used as a structure for qualitative analysis of interview data. In the first step of data analysis, interview transcripts were coded and memoed. Pattern coding is described by Miles and Huberman (1984) as explanatory or inferential codes that help to identify emerging themes, patterns, or explanation. Pattern coding serves several important purposes. First, it reduces large amounts of data into a smaller number of analytic units. Additionally, it helps the researcher construct a cognitive map. Finally, it lays the groundwork for cross-site analysis by surfacing common themes and causal processes. Following pattern coding, the data were memoed. Miles and Huberman described memoing as the theorizing write-up of ideas about codes and their conceptual relationships.

In the second step of analysis, domains were identified. Spradley (1979) described domains as semantic relationships within the data. Next, a taxonomic analysis was conducted to identify subsets of themes within each domain and to examine the relationships of those subsets included within the domain. Finally, a componential analysis was made in a systematic search for attributes within themes.

In the final phase, conclusions were drawn about the interview data. Conclusions were validated by having an independent reader, familiar with

both qualitative research and teacher education, complete the process of establishing domains. Domains identified by the researcher and by the independent reader were then compared for overlap. (See Appendix G for Domains and Themes.)

Participants' experiences with each model of student teacher supervision were recounted. Their perceptions about strengths and limitations of traditional and alternative models of student teacher supervision were described. Information was summarized for the purpose of informing teacher educators about how to improve university supervision of student teachers.

## Summary

Two research methodologies were employed in this study to compare student teaching outcomes for interns who received traditional university supervision with interns who received alternative student teaching supervision during their semester of full-time teaching. First, a quantitative comparison of scores on repeated measures of teaching performance for the two groups of interns (i.e., traditional versus alternative university supervision) was made. Repeated measures of analysis of variance (ANOVA) were computed for each of the four teaching domains (i.e., seatwork management, instructional management and lesson presentation, time management, and classroom management) to determine if there were any significant differences between treatment groups on scores after adjusting for individual differences.

Second, interviews were conducted with interns, cooperating teachers, and university supervisors from each treatment group. The purpose of conducting interviews was to gain in-depth understanding of benefits and disadvantages associated with traditional and alternative models of student teacher supervision. An ethnographic approach to interviewing was employed.

Results of this study are presented and analyzed in the following chapter. In Chapter 5, conclusions and implications drawn from the results are discussed, and recommendations for future research are made.

# CHAPTER 4
# RESULTS

## Research Component I: Quantitative Comparison of Student Teaching Performance

To compare the teaching performance of interns who received traditional student teaching supervision with the teaching performance of interns who received alternative supervision, four null hypotheses were tested:

$H_1$: There will be no significant differences between mean scores on a measure of seatwork management competencies for interns who received traditional university supervision and those who received alternative student teaching supervision.

$H_2$: There will be no significant differences between mean scores on a measure of instructional management and lesson presentation competencies for interns who received traditional university supervision and those who received alternative student teaching supervision.

$H_3$: There will be no significant differences between mean scores on a measure of time management competencies for interns who received traditional university supervision and those who received alternative student teaching supervision.

$H_4$: There will be no significant differences between mean scores on a measure of classroom management competencies for interns who received

traditional university supervision and those who received alternative student teaching supervision.

Four domains of intern teaching performance were assessed using rating scales adapted from Englert et al. (1992): classroom management competencies, time management competencies, instructional management and lesson presentation competencies, and seatwork management competencies. Reliability was determined by obtaining measures of internal consistency for each rating scale.

Rating scales were administered six times during the semester to assess professional growth and progress on each domain for each intern. A repeated measures analysis of variance (ANOVA) was used to determine if there were any significant differences between treatment groups. Independent ANOVAs were computed for each of the four rating scales of student teacher performance (i.e., classroom management, time management, instructional management and lesson presentation, and seatwork management). Level of significance was established at $\alpha = .05$ for all ANOVAs.

## Seatwork Management

To compare the teaching performance of interns who received traditional university supervision with the teaching performance of interns who received alternative student teaching supervision, the following null hypothesis was tested: There will be no significant differences between mean scores on a measure of seatwork management competencies for interns who received traditional university supervision and those who received alternative student teaching supervision. Findings revealed that on measures of seatwork management competencies, there was no significant difference between mean

scores of interns who received traditional university supervision and those who received alternative supervision. Descriptive and inferential statistics are reported in Table 5 and Table 6, respectively.

Table 5

Means for Seatwork Management

| | Treatment Group | | | | | |
|---|---|---|---|---|---|---|
| | Traditional | | | Alternative | | |
| Measure | n | M | SD | N | M | SD |
| 1 | 15 | 4.49 | 0.57 | 15 | 4.94 | 0.89 |
| 2 | 14 | 5.22 | 0.61 | 16 | 5.16 | 0.87 |
| 3 | 13 | 5.73 | 0.76 | 15 | 5.71 | 0.91 |
| 4 | 13 | 6.00 | 0.80 | 14 | 6.21 | 0.80 |
| 5 | 13 | 6.35 | 0.86 | 13 | 6.42 | 0.91 |
| 6 | 11 | 6.60 | 0.69 | 13 | 6.67 | 0.83 |

Mean Scores

On rating scales assessing intern performance on a measure of seatwork management competencies, mean scores increased on each of the six measures during the course of the student teaching semester (see Table 5). This held true for both traditional and alternative treatment groups.

Table 6

Summary Table for Seatwork Management

| Source | df | SS | MS | F | Pr > F |
|---|---|---|---|---|---|
| Between | | | | | |
| Group | 1 | 0.0258 | 0.0258 | 0.01 | 0.9276 |
| Error | 15 | 45.3870 | 3.0258 | | |
| Within | | | | | |
| SM | 5 | 36.4670 | 7.2934 | 35.42 | 0.0001 |
| SM*Group | 5 | 0.5506 | 0.1101 | 0.53 | 0.7493 |
| Error | 75 | 15.4429 | 0.2059 | | |

Repeated Measures Analysis of Variance

To test the hypothesis that there would be no difference in the rate of progress on measures of seatwork management competencies between interns receiving traditional university supervision and those receiving alternative supervision, a repeated measures analysis of variance (ANOVA) was calculated (see Table 6). Although results of repeated measures analysis of variance revealed no significant between-subjects effect, there was significant ($Pr > F = 0.0001$) effect due to time on univariate tests of hypotheses for within-subjects effects. The finding of significant within-subjects occasion did not lead to rejection of the null hypothesis, indicating that interns who received alternative student teaching supervision performed equally well compared to interns who received traditional university supervision on measures of seatwork management.

Instructional Management and Lesson Presentation

To compare the teaching performance of interns who received traditional treatment with those who received alternative treatment, the following null hypothesis was tested: There will be no significant differences between mean scores on measures of instructional management and lesson presentation competencies for interns who received traditional university supervision and those who received alternative student teaching supervision. Results indicated that on measures of instructional management and lesson presentation competencies, there was no significant difference between mean scores of interns who received traditional university supervision and those who received alternative supervision. Descriptive and inferential statistics are reported in Table 7 and Table 8, respectively.

Table 7

Means for Instructional Management and Lesson Presentation

| | Treatment Group | | | | | |
|---|---|---|---|---|---|---|
| | Traditional | | | Alternative | | |
| Measure | n | M | SD | N | M | SD |
| 1 | 14 | 4.55 | 0.58 | 16 | 4.89 | 0.78 |
| 2 | 14 | 4.87 | 0.75 | 16 | 4.92 | 0.94 |
| 3 | 12 | 5.72 | 0.78 | 14 | 5.58 | 0.83 |
| 4 | 14 | 5.87 | 0.88 | 16 | 6.04 | 0.77 |
| 5 | 13 | 6.45 | 0.78 | 14 | 6.34 | 0.91 |
| 6 | 11 | 6.42 | 0.89 | 13 | 6.68 | 0.80 |

Mean Scores

On rating scales assessing intern performance on a measure of instructional management and lesson presentation competencies, mean scores increased for both traditional and alternative treatment groups (see Table 7). Mean scores reflected steady growth for both models.

Table 8

Summary Table for Instructional Management and Lesson Presentation

| Source | df | SS | MS | F | Pr > F |
|---|---|---|---|---|---|
| Between | | | | | |
| Group | 1 | 1.1712 | 1.1712 | 0.33 | 0.5758 |
| Error | 16 | 57.4236 | 3.5889 | | |
| Within | | | | | |
| SM | 5 | 33.6609 | 6.7322 | 35.70 | 0.0001 |
| SM*Group | 5 | 0.0666 | 0.0133 | 0.07 | 0.9964 |
| Error | 80 | 15.0855 | 0.1886 | | |

Repeated Measures Analysis of Variance

To test the hypothesis that there would be no difference in the rate of progress between interns receiving traditional university supervision and those receiving alternative supervision, a repeated measures analysis of variance

(ANOVA) was calculated for scores on the instructional management and lesson presentation domain (see Table 8). On measures of instructional management and lesson presentation competencies, repeated measures analysis of variance revealed no significant between-subjects effect, but did reveal a significant ($Pr > F = 0.0001$) effect due to time on univariate tests of hypotheses for within-subjects effects. The finding of significant within-subjects occasion did not lead to rejection of the null hypothesis, indicating that interns who received alternative student teaching supervision performed equally well compared to interns who received traditional university supervision on measures of instructional management and lesson presentation.

## Time Management

To compare the teaching performance of interns who received traditional supervision with those who received alternative supervision, the following null hypothesis was tested: There will be no significant differences between mean scores on a measure of time management competencies for interns who received traditional university supervision and those who received alternative student teaching supervision. On measures of time management competencies, findings revealed no significant difference between mean scores of interns who received traditional university supervision and those who received alternative supervision. Descriptive and inferential statistics are reported in Table 9 and Table 10, respectively.

### Mean Scores

On rating scales assessing intern performance on a measure of time management competencies, mean scores increased for both traditional and

alternative treatment groups (see Table 9). Mean scores reflected positive growth for both models.

Table 9

Means for Time Management

| | Treatment Group | | | | | |
|---|---|---|---|---|---|---|
| | Traditional | | | Alternative | | |
| Measure | n | M | SD | N | M | SD |
| 1 | 15 | 4.61 | 0.73 | 16 | 4.65 | 0.75 |
| 2 | 14 | 4.88 | 0.80 | 16 | 4.89 | 0.92 |
| 3 | 12 | 5.68 | 0.93 | 14 | 5.58 | 0.90 |
| 4 | 14 | 5.87 | 1.01 | 16 | 6.05 | 0.71 |
| 5 | 13 | 6.42 | 0.87 | 14 | 6.26 | 1.09 |
| 6 | 11 | 6.33 | 0.94 | 13 | 6.64 | 0.94 |

Table 10

Summary Table for Time Management

| Source | df | SS | MS | F | Pr > F |
|---|---|---|---|---|---|
| Between | | | | | |
| Group | 1 | 0.4913 | 0.4913 | 0.13 | 0.7276 |
| Error | 16 | 62.5459 | 3.9091 | | |
| Within | | | | | |
| SM | 5 | 33.4942 | 6.6988 | 24.67 | 0.0001 |
| SM*Group | 5 | 0.5338 | 0.1068 | 0.39 | 0.8522 |
| Error | 80 | 21.7249 | 0.2716 | | |

Repeated Measures Analysis of Variance

To test the hypothesis that there would be no difference in the rate of progress on time management competencies between interns receiving traditional university supervision and those receiving alternative supervision, a repeated measures analysis of variance (ANOVA) was calculated (see Table 10). Although results of repeated measures analysis of variance revealed no

significant between-subjects effect, there was a significant (Pr > F = 0.0001) effect due to time on univariate tests of hypotheses for within-subject effects. The finding of significant within-subjects occasion did not lead to rejection of the null hypothesis, indicating that interns who received alternative student teaching supervision performed equally well compared to interns who received traditional university supervision on measures of time management.

## Classroom Management

To compare the teaching performance of interns in the traditional and alternative treatment groups, the following null hypothesis was tested: There will be no significant differences between mean scores on a measure of classroom management competencies for interns who received traditional university supervision and those who received alternative student teaching supervision. Results indicated that on a measure of classroom management competencies, there was no significant difference between mean scores of interns who received traditional university supervision and those who received alternative supervision. Descriptive and inferential statistics for classroom management are reported in Table 11 and 12, respectively.

Table 11

Means for Classroom Management

| | Treatment Group | | | | | |
|---|---|---|---|---|---|---|
| | Traditional | | | Alternative | | |
| Measure | n | M | SD | N | M | SD |
| 1 | 16 | 4.67 | 0.82 | 16 | 4.69 | 0.80 |
| 2 | 14 | 5.07 | 0.68 | 16 | 5.02 | 0.96 |
| 3 | 12 | 5.74 | 0.76 | 14 | 5.79 | 0.99 |
| 4 | 12 | 5.99 | 0.84 | 15 | 6.18 | 0.88 |
| 5 | 12 | 6.42 | 0.81 | 15 | 6.37 | 1.01 |
| 6 | 11 | 6.40 | 0.94 | 13 | 6.68 | 0.91 |

Mean Scores

On rating scales assessing intern performance on a measure of classroom management competencies, mean scores increased for both traditional and alternative treatment groups (see Table 11). Mean scores reflected steady growth for both models.

Table 12

Summary Table for Classroom Management

| Source | df | SS | MS | F | Pr > F |
|---|---|---|---|---|---|
| Between | | | | | |
| Group | 1 | 0.4379 | 0.4379 | 0.12 | 0.7368 |
| Error | 17 | 63.7660 | 3.7509 | | |
| Within | | | | | |
| SM | 5 | 34.0543 | 6.8109 | 28.65 | 0.0001 |
| SM*Group | 5 | 0.7211 | 0.1442 | 0.61 | 0.6949 |
| Error | 85 | 20.2058 | 0.2377 | | |

Repeated Measures Analysis of Variance

To test the hypothesis that there would be no difference between interns receiving traditional university supervision and those receiving alternative supervision in their rate of progress on classroom management, a repeated measures analysis of variance (ANOVA) was calculated (see Table 12). Repeated measures analysis of variance revealed no significant between-subjects effect, but did reveal a significant ($Pr > F = 0.0001$) effect due to time on univariate tests of hypotheses for within-subjects effects. The finding of significant within-subjects occasion did not lead to rejection the null hypothesis, indicating that interns who received alternative student teaching performed equally well compared to interns who received traditional university supervision on measures of classroom management.

## Summary of Mean Scores for Treatment Groups

On rating scales assessing seatwork management, instructional management and lesson presentation, time management, and classroom management competencies, mean scores increased during the course of the student teaching semester. This held true for both traditional and alternative treatment groups. Mean scores indicated positive growth over time for both models.

## Summary of Inferential Statistics

To test for differences in the rate of progress between interns receiving traditional university supervision and interns receiving alternative student teaching supervision, independent ANOVAs were applied to repeated measures on each of the four domains: seatwork management, instructional management and lesson presentation, time management, and classroom management. The procedure produced tests of hypotheses for between-subjects effects and univariate tests of hypotheses for within-subject effects. Level of significance was set at $\alpha = .05$ (see Tables 6, 8, 10, and 12).

Results of repeated measures analysis of variance revealed no significant between-subjects effect on any of the four domains. Univariate tests of hypotheses for within-subjects effects revealed significant ($Pr > F = 0.0001$) effect due to time on all four domains. The finding of significant within-subject occasion did not lead to rejection of null hypotheses. On all four domains (i.e., seatwork management, instructional management and lesson presentation, time management and classroom management), interns who received alternative student teaching supervision scored equally well compared to interns who received traditional university supervision.

Research Component II: Qualitative Analysis of Interviews

To better understand the benefits and disadvantages of each model of student teacher supervision, the following questions were investigated:

#1. What do cooperating teachers who participated in the traditional model of intern supervision cite as the benefits or advantages of having a university supervisor directly involved?

#2. What do cooperating teachers who participated in the traditional model of intern supervision cite as the disadvantages or drawbacks of having a university supervisor directly involved?

#3. What do cooperating teachers who participated in the alternative model of intern supervision cite as the benefits or advantages of assuming primary responsibility for intern supervision, rather than having a university supervisor directly involved?

#4. What do cooperating teachers who participated in the alternative model of intern supervision cite as the disadvantages or drawbacks of assuming primary responsibility for intern supervision, rather than having a university supervisor directly involved?

#5. What do interns who received traditional supervision cite as the benefits or advantages of having a university supervisor directly involved?

#6. What do interns who received traditional supervision cite as the disadvantages or drawbacks of having a university supervisor directly involved?

#7. What do interns whose cooperating teacher assumed primary responsibility for supervision cite as the benefits or advantages of not having a university supervisor directly involved?

#8. What do interns whose cooperating teacher assumed primary responsibility for supervision cite as the disadvantages or drawbacks of not having a university supervisor directly involved?

#9. What do university supervisors who participated in the traditional model of intern supervision consider to be the strengths of their role?

#10. What do university supervisors who participated in the traditional model of intern supervision consider to be the limitations of their role?

#11. What do university supervisors who participated in the alternative model of intern supervision consider to be the strengths of their role?

#12. What do university supervisors who participated in the alternative model of intern supervision consider to be the limitations of their role?

## Traditional Model

During the final week of internship, two triads (i.e. university supervisor, cooperating teacher, and intern) were interviewed about their experience with the traditional model of student teaching supervision. Triad A was selected because their experience appeared to be both successful and typical, and it was thought that they had not encountered any problems. However, it became apparent during the interviews that Triad A had experienced chronic problems with supervision but had chosen not to acknowledge the conflict. Triad B was chosen because they had acknowledged encountering problems during the semester. The purpose of the interviews was to gain an in-depth understanding about how participants perceived strengths and limitations of the traditional model of student teaching supervision.

Benefits and Advantages of Traditional Model

University supervisors. Supervisor A, from the triad that had not revealed chronic conflict, had little to say about the benefits of traditional supervision. He considered university supervisors to be more current than cooperating teachers, and he thought outsiders approached matters from a different perspective.

Supervisor B, from the triad that acknowledged conflict from the outset, had considerably more to say about the benefits of traditional supervision. She considered her role to be helpful by providing information, assuring that requirements were met, helping with scheduling and conferencing, and providing feedback on lesson plans and observations. She viewed outsider status as being advantageous, perceiving herself as a buffer and mediator, taking pressure off the intern, providing opportunity to vent, and preventing conflict by assuming "the role of the bad guy." When differences of opinion arose, she thought, cooperating teachers were more open to suggestions from outsiders.

Cooperating teachers. Teacher A, from the triad that experienced persistent conflict, reported no benefits of traditional supervision during this semester. In the past, however, she had found university supervisors to be helpful and directive.

Teacher B, from the triad that had acknowledged problems from the outset, perceived traditional university supervision to be very helpful in numerous ways. She was grateful to have someone to share the administrative workload, to clarify questions and provide guidelines about internship requirements, to provide follow-up at seminars, and to help the intern through

difficult experiences. Teacher B appreciated the university supervisor's helpfulness in providing new perspectives, sharing knowledge and experience, and offering materials and methods. The university supervisor's observations became the basis of support for Teacher B. She perceived the university supervisor as an outsider who could provide constructive feedback to the intern and who could smooth out or head off interpersonal conflict, especially around issues of classroom practice. In her experience, the university supervisor's opinion carried more weight and, therefore, was respected and more easily accepted by the intern. Teacher B described having her opinions "reaffirmed and validated" by the university supervisor, especially when she and the intern were in disagreement.

Interns. Intern A, from the triad initially thought to be free of problems but later found to be rife with problems, spoke only hypothetically about the advantages and benefits of traditional university supervision. Ideally, she would have expected the university supervisor to offer guidance and suggestions, to give reminders of requirements and due dates, and to provide unbiased feedback from the perspective of an outsider. She saw potential opportunity to become accustomed to having classroom visitors and establishing connections with other educators. In reality, Intern A could not identify any advantages or benefits of traditional university supervision in her experience.

Intern B, from the triad with known problems, thought it was beneficial to have someone to relieve the cooperating teacher of administrative responsibilities associated with the internship program, to keep them on schedule by providing reminders of meetings and assignments, and to communicate information from the university. She thought the supervisor

served as a link with the university, providing new ideas, suggestions, strategies, and methods. The university supervisor was the "voice of experience" in providing "additional feedback, better ideas, and increased confidence." Intern B placed considerable importance on the role of an outsider. She saw the university supervisor as being an unbiased outsider, someone who could support the intern in differences of opinion with the cooperating teacher, without risk of reflection on the final evaluation. In much the same way that Teacher B thought her intern was more accepting of critical feedback from the university supervisor, Intern B thought her cooperating teacher was more receptive to new ideas if they came from the supervisor rather than from the intern. Overall, Intern B credited the university supervisor with her professional growth during internship. In her experience, it was the university perspective that provided fresh ideas for classroom practice.

Disadvantages and Drawbacks of Traditional Model

University supervisors. Supervisor A, from the triad that remained silent about their persistent problems, spoke only of time constraints. Observation and conferencing requirements of traditional supervision were demanding. Finding that his "scheduling demands were tight," he "had to sandwich observations in between other responsibilities." He identified no other disadvantages or limitations of the traditional model of university supervision.

Supervisor B, from the triad with known conflicts, also spoke of time demands. She felt limited by insufficient time to schedule lengthy visits. In this regard, she pointed out the need for increased administrative support from the university. After dealing with conflict between the intern and cooperating teacher, Supervisor B identified two major limitations. First, personalities and

preferences should be matched to minimize potential for internship problems. Second, she concluded that "when an intern is set in his or her thinking about teaching, they are not tremendously influenced by a university supervisor."

Cooperating teachers. Teacher A, from the quietly troubled triad, also spoke only of time demands associated with traditional university supervision. She identified two major limitations and disadvantages associated with traditional supervision of student teachers. First, it creates the pressure of someone arriving at a scheduled time. Secondly, scheduled observations limit spontaneity in teaching. At times, teachable moments are missed.

Teacher B, from the openly troubled triad, did not identify any real or existing limitations of the traditional model of student teacher supervision. She suggested that, hypothetically, a university supervisor could demand too much time.

Interns. Intern A, who chose not to reveal problems within the triad, identified time as a limitation. The traditional model of supervision imposed scheduling demands, creating conflicts with instructional time. In her experience, "having to deal with another person coming into the relationship between teacher and intern" was a significant limitation. Having a university supervisor who did not follow procedures and who did not provide help only created additional stress.

Intern B, who chose to ask for help with problems within the triad, explained that she encountered "conflict of roles, not interpersonal relationships." She found conflict in trying to meet requirements of both the classroom teacher and the internship program. Intern B, placed in a classroom of very young children with severe disabilities, described visits by the university

supervisor as being disruptive to the classroom. In her experience, having another outsider coming into the classroom caused disruption and distraction for the children, which, in turn, compromised the fairness of her observation by the university supervisor.

Summary of Advantages and Disadvantages of the Traditional Model

Triad A was initially thought to have encountered no problems. During the interview, it was discovered that the participants had experienced significant conflict but had chosen not to reveal their persistent problems to the university. None of the Triad A participants reported any actual benefits of the traditional model of university supervision. Neither the supervisor nor the cooperating teacher could identify any benefit or advantage. The intern spoke only of hypothetical benefits.

On the other hand, participants of Triad B, which was known to have conflicts, reported numerous advantages and benefits of the traditional mode. They cited help with administrative responsibilities, providing guidance about internship requirements, offering a different perspective and new methods and materials, diffusing and resolving conflict, and providing objective feedback based on observational data. Additionally, the intern valued the professional opinion of an outsider with a university connection.

Participants of both Triad A and Triad B mentioned time demands as being the primary limitation of the traditional model of university supervision. Additionally, Intern B reported experiencing a conflict of roles but not interpersonal conflict.

## Alternative Model

During the final week of the internship semester, two triads (i.e., university supervisor, cooperating teacher, and intern) were interviewed about their experience with the alternative model of student teaching supervision. Triad C was selected because their experience appeared to be both successful and typical and they had not acknowledged experiencing any problems. Triad D was selected because they had acknowledged problems during the semester. The purpose of the interviews was to gain a deeper understanding about how participants perceived strengths and limitations of the alternative model of student teaching supervision.

### Benefits and Advantages of the Alternative Model

University supervisors. Supervisor C, from the smooth running triad, appreciated the flexibility and options inherent in the alternative model of supervision. She served as a sounding board for the intern, provided options, handled the paperwork, and kept the intern on schedule. She spoke of having the flexibility to provide optional activities in order to help the intern build self-confidence. Supervisor C summed her experience in this way, "I talked with [the teacher], and she was just glowing about how well he was doing. Then I thought, this is a blessing in disguise." She attributed their success to having a cooperating teacher who was both strong and reflective in practice.

Supervisor D, from the triad with known problems, defined her role as being helpful in terms of offering support, sharing, and confirming seminars. She reported staying in close touch. Keeping in contact was easy because she knew the classroom and the cooperating teacher from previous semesters. In

her opinion, the intern received excellent feedback from the cooperating teacher.

Cooperating teachers. Teacher C, from the triad encountering no problems, most appreciated the close interpersonal relationship that resulted from the alternative model. She found the alternative arrangement brought her closer to the intern and enabled them to get to know each other better. In turn, their familiarity made it easier for her to pinpoint the intern's areas of growth and to be more helpful.

Teacher D, from the triad confronted with challenges, enjoyed the opportunity to do observations and provide feedback to the intern. She welcomed the opportunity to get away from a set schedule of observations. Not being on display was less stressful. Teacher D, who taught young children with severe disabilities, found it "better to assume responsibility than to have a supervisor who isn't knowledgeable about the area of severe disabilities." One advantage, she said, was "not having another person to tell us what we knew already."

Interns. Intern C, from the smooth running triad, found the alternative model to be easier, less stressful, and a more comfortable environment than the traditional model of university supervision. Like his cooperating teacher, Intern C thought they got to know each other better, making the situation more realistic and more relaxed. With less structure, they were able to take advantage of naturally occurring opportunities and thus accomplish more. With no outsider, there was no change in the classroom and observations were more natural. "The cooperating teacher knows the situation best, outsiders don't." Like his supervisor, Intern C appreciated the flexibility of helpful activities and found

lesson planning to be more realistic. Feedback from his cooperating teacher, he thought, was strong and objective.

Intern D, who encountered problems within the triad, appreciated the flexibility allowed by the alternative model. With no scheduling conflicts or constraints, she experienced increased flexibility with lesson planning. Flexible scheduling also allowed spontaneity in classroom teaching.

Disadvantages and Drawbacks of the Alternative Model

University supervisors. Supervisor C, from the triad without problems, cited both personal and administrative drawbacks to the alternative model. Initially, she "felt like an outsider, isolated, removed from the situation and not in control." If not for the seminars, she expressed doubt that she could have kept the semester running smoothly. Supervisor C also reported missing personal contact on a regular basis and missed being in the classroom. Initially, she found it challenging to help the intern build confidence without having classroom contact. She expressed concern about potential problems if the cooperating teacher is not reflective.

Likewise, Supervisor D, from the triad with known problems, missed personal contact and "initially felt the loss of personalities." She missed seeing lesson plans, initially feeling like she "couldn't keep her hands on matters." And, like the other alternative supervisor, she expressed concern about potential problems with the quality of feedback provided by cooperating teachers in the alternative model.

Cooperating teachers. Teacher C, from the triad with no problems, spoke of administrative demands as the primary drawback of the alternative model. She cited difficulty getting lesson plans in on time and not being familiar with

the forms. Importantly, she felt a huge responsibility for additional areas with no reward for increased time demands. She wondered about lost perspective and objectivity that university supervisors typically provide. "University supervisors may see big things, like the forest and the trees."

Teacher D, from the triad with acknowledged conflict, also cited administrative time demands as the primary drawback of the alternative model. With no one to keep them on schedule and provide due date reminders, they found it difficult to keep up with observations. With the alternative model, Teacher D felt that she lost the advantage of having an additional person to do the observations. "That means the teacher doesn't have the opportunity to sit back and be the observer while someone else takes responsibility for observation notes and conferencing. It's one less person to give consistent feedback." Teacher D also missed the outside perspective of a visitor.

Interns. Intern C, from the triad without conflict, expressed drawbacks similar to his cooperating teacher and supervisor. Intern C missed the outside influence, partly because of the teacher's hectic schedule. Due dates slipped by and more guidelines were needed. With no outsider to offer a different perspective and with the cooperating teacher too busy to spend time reflecting, Intern C missed the feedback cycle on projects and lesson plans.

Intern D, from the triad with known problems, missed connecting with the university and wanted support and comfort from a supervisor. Intern D "valued professors' opinions more than cooperating teachers' opinions" and thought a professor could have provided alternative ideas and methods. With the alternative model, Intern D felt lack of support, structure, input, and discussion. Communication with the university was more of an effort. She wanted more

input from the university but did not have easy access to professors. In the intern's opinion, the classroom did not fit with requirements, and there was no one to help make it fit. The teacher provided no reflection; instead, she "had it all internalized. She gave answers versus explanations." Under the circumstances, Intern D thought a university supervisor would have been less critical of her teaching than her cooperating teacher.

Summary of Advantages and Disadvantages of the Alternative Model

Both supervisors in the alternative model perceived their role as being helpful with administrative responsibilities, offering support, and keeping things on schedule. They both appreciated the flexibility of options afforded by the alternative model. This held true regardless of whether or not they experienced conflict during the semester. Both cooperating teachers and both interns mentioned not having scheduling conflicts and liked the more naturally occurring opportunities and teachable moments. Again, this held true regardless of whether or not they experienced problems. Participants of Triad C all remarked that they were able to form closer, more productive relationships as a twosome.

Time demands were the drawback mentioned by all participants in the alternative model. Both cooperating teachers mentioned increased responsibilities without reward. Both interns noted lack of time for reflection with their cooperating teachers. Both supervisors missed personal contact and direct involvement in the classroom and initially worried about loss of control. This held true whether or not they experienced conflict. Participants of Triad D all sensed the loss of involvement by an objective outsider with university connections.

## Summary of Advantages and Disadvantages of Models

Advantages and disadvantages identified by participants in traditional and alternative models are summarized and presented Tables 13 and 14. Table 13 summarizes benefits and advantages of each model as identified by university supervisors, cooperating teachers, and interns. Table 14 summarizes disadvantages and drawbacks of each model as identified by university supervisors, cooperating teachers, and interns.

In this study, participant interviews provided a better understanding of the advantages and disadvantages of traditional and alternative models of university supervision of student teachers. In addition to eliciting information about benefits and drawbacks of each model, the interviews also yielded valuable insights about various aspects of student teaching supervision from the participants' perspective. Analysis of themes emerging from participant interviews is presented in the following section.

## Emerging Themes

Using Spradley's (1979) ethnographic approach, interviews were analyzed and coded to identify emerging themes, patterns, or explanations. Next, domains or semantic relationships within the data were identified. Then, a taxonomic analysis was conducted to identify subsets of themes within each domain. Finally, conclusions were validated by having an independent reader, familiar with both qualitative research and teacher education, complete the process of establishing domains and themes.

For purposes of validation, the independent reader was given copies of interview transcripts with no identifying information. Themes were generated independently by the readers. Lists were then compared and contrasted.

Table 13

Benefits and Advantages of Traditional and Alternative Models

| Participant | Model | |
|---|---|---|
| | Traditional | Alternative |
| University supervisors | Supervisor helps by providing information; assuring that requirements are met; observing and conferencing; providing feedback on lesson plans and observations; acting as buffer and mediator.<br><br>University supervisors may be more current in knowledge of teaching practices than cooperating teachers.<br><br>Outsiders offer different perspective.<br><br>Cooperating teacher more open to suggestions from objective outsider. | Supervisor helps by serving as sounding board for intern, providing options, handling paperwork, keeping participants on schedule, offering support.<br><br>Model allows flexibility and options. |
| Cooperating teachers | Administrative workload is shared.<br><br>Supervisor clarifies questions and provides guidelines about internship requirements; provides basis of support for cooperating teacher.<br><br>Supervisor helps intern through difficult experiences; smoothes out or heads off conflict, especially around issues of classroom practice.<br><br>Supervisor provides new perspectives; shares knowledge and experience; offers new materials and methods; provides constructive feedback.<br><br>Supervisor's opinion carries more weight, more respected, more easily accepted by intern; reaffirms and validates opinions of cooperating teacher, especially when in conflict with intern. | Model allows close interpersonal relationship, creating easier and more natural opportunities to provide feedback and foster professional growth.<br><br>Model allows flexibility in scheduling observations; provides opportunity for cooperating teacher to do observations and conferencing.<br><br>Less stressful without outsider; preferable to having a university supervisor not familiar with area of exceptionality. |

Table 13--continued

| | | |
|---|---|---|
| Interns | Supervisor shares administrative responsibilities with cooperating teacher.<br><br>Supervisor helps by keeping participants on schedule; providing reminders of meetings and assignments; communicating information from university.<br><br>Supervisor serves as link with university, providing new ideas, suggestions, strategies, methods.<br><br>Supervisor provides unbiased outside perspective; voice of experience, providing additional feedback, better ideas, increased confidence.<br><br>Supervisor supports intern in differences of opinion with cooperating teacher, without risk of lower evaluation and final grade.; easier to accept critical feedback from university supervisor than cooperating teacher. | Twosome creates less stressful, more comfortable environment; increased familiarity creates more realistic and more relaxed situation.<br><br>Model allows spontaneity in classroom teaching; flexibility of activities; more realistic lesson planning; more naturally occurring opportunities without imposed schedule of outsider.<br><br>Model allows opportunity for strong and objective feedback from cooperating teacher. |

Table 14

Disadvantages and Drawbacks of Traditional and Alternative Models

| Participant | Model | |
|---|---|---|
| | Traditional | Alternative |
| University supervisors | Time constraints; demands of observation and conferencing requirements; limited by insufficient time to schedule lengthy classroom visits.<br><br>Lack of administrative support from university.<br><br>Conflict created by mismatched personalities and preferences.<br><br>Lack of influence on intern practices and thinking. | Initially felt loss of personalities; missed personal contact on regular basis; felt like outsider, isolated, removed from the situation, not in control.<br><br>Missed being in classroom, seeing lesson plans; initially felt as if couldn't keep hands on matters.<br><br>Concerns about cooperating teacher not engaging in reflective practice; potential problem with quality of feedback provided by cooperating teacher. |
| Cooperating teachers | Time demands of university supervision; pressure of someone arriving at a scheduled time.<br><br>Scheduled observations limit spontaneity in teaching; teachable moments are missed. | Administrative time demands; increase responsibility with no reward.<br><br>Difficulty getting lesson plans in on time and keeping up with observations; unfamiliarity with forms.<br><br>Loss of perspective and objectivity provided by university supervisor. |
| Interns | Time limitations; scheduling demands create conflict with instructional time; observations disruptive to classroom.<br><br>Having to deal with outsider in relationship; conflict inherent in threesome.<br><br>Conflict of roles; trying to meet conflicting requirements and expectations of both cooperating teacher and internship program. | Missed outside influence; lost perspective of supervisor's feedback cycle on projects and lesson plans.<br><br>Missed connection with university; missed valued opinion of professor; lacked support and reassurance; communication with university more difficult; no easy access to professors.<br><br>Needed clearer guidelines about requirements.<br><br>If teacher's schedule was too hectic, lack of support, structure, input, reflection, and discussion. |

Themes identified by the independent reader were consistent with those identified by the researcher. Lists of themes identified by the researcher and the independent reader are included in Appendix G.

Two distinct domains emerged from the qualitative interview data: administrative concerns and personal interactions. Within those domains, several themes emerged. Administrative concerns included communication, responsibilities, factors that influence outcomes, and internship program considerations. Personal interactions included functions and roles, perceptions, dealing with conflict, events that change relationships, personalities and revealing language, stress and comfort, and things missed or lost.

Table 15 presents a list of emerging themes and a corresponding frequency matrix. The matrix reports the number of times each theme was discussed by each participant. In recording the number of times each theme was mentioned, only distinct and separate mention or discussion was counted. Repeated mentions were not counted if they occurred within discussion of the same topic within the same conversation.

The frequency matrix reveals several interesting trends that further support the qualitative data in this study. With the exception of Supervisor A, university supervisors were more consistently concerned with communication than were interns and cooperating teachers. All participants mentioned responsibilities and factors that influence outcomes. Interns mentioned program considerations more often than did cooperating teachers or university supervisors. Interns discussed personal interactions more frequently than did

Table 15

Emerging Themes

| | Interns | | | | Teachers | | | | Supervisors | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | A | B | C | D | A | B | C | D |
| Administrative Concerns | | | | | | | | | | | | |
| Communication | | | | | | | | | | | | |
| Importance of communication | 5 | | | 5 | 1 | 3 | | | | 3 | 3 | 3 |
| Ways of staying in contact | | | | 2 | | 1 | | | 1 | 3 | 3 | 2 |
| Phone as important link | | | | 1 | | 2 | | | | 4 | 5 | 6 |
| Responsibilities | | | | | | | | | | | | |
| Supporting and maintaining control | 5 | 5 | 3 | 2 | 3 | 8 | 3 | 1 | 3 | 6 | 1 | 2 |
| Administrative duties | 5 | 4 | 5 | 1 | 5 | 5 | 7 | 2 | 5 | 5 | 3 | |
| Feedback and evaluation | 5 | 6 | 7 | 4 | 3 | 4 | 2 | 3 | 2 | 6 | 1 | 2 |
| Assignments and requirements | 3 | 4 | 6 | 3 | 3 | 4 | 2 | 2 | 1 | 5 | 1 | 1 |
| Factors that Influence Outcomes | | | | | | | | | | | | |
| Personal resources that define | 8 | 5 | 3 | 5 | 4 | 3 | 2 | | 3 | 5 | 2 | |
| Givens | 2 | 1 | 4 | 2 | | 2 | 1 | 1 | 3 | 3 | 2 | |
| Professional resources that define | 9 | 4 | 4 | 6 | 6 | 6 | 2 | 5 | 3 | 3 | 2 | 2 |
| Internship Program Considerations | | | | | | | | | | | | |
| Program organization | 3 | | 2 | 1 | 1 | | 3 | | | | 1 | 1 |
| Differences between models | 1 | 2 | 4 | 2 | 1 | | | 1 | | | | 1 |
| Problems and risks | 3 | 6 | 3 | 3 | 6 | 1 | | 1 | 1 | 3 | 3 | |
| Events that change internship | 4 | | | | 6 | | | | | | | |
| Personal Interactions | | | | | | | | | | | | |
| Functions and roles | 4 | 2 | 2 | 2 | 4 | 4 | 1 | | | 4 | | 2 |
| Perceptions | 3 | 3 | 2 | 4 | 1 | 3 | | | 1 | | 3 | 1 |
| Dealing with conflict | 6 | 3 | | 4 | 3 | 7 | | | 5 | 3 | | |
| Events that change relationships | 2 | | | | 4 | | | | | | | |
| Personalities and revealing language | 5 | 2 | 2 | 4 | 3 | 5 | 1 | | 9 | 2 | 1 | |
| Stress and comfort | 2 | 1 | 2 | 4 | 2 | 2 | | 1 | 2 | 1 | | |
| Things missed or lost | 4 | | 3 | 2 | 2 | | 1 | 3 | | | 2 | 3 |

teachers or supervisors. Mention of personal interactions was more frequent among participants of the triad experiencing significant conflict.

Conflict

Of all the themes to emerge from participant interviews, perhaps the most informative aspect was a deeper understanding of conflict within student teaching triads. The case of Triad A is particularly illustrative. Triad participants were selected for interview because they appeared to represent successful, smooth-running, problem-free experience with traditional university supervision. Requirements were met; assignments were completed on time; the intern progressed; the classroom ran smoothly; and there appeared to be no conflict. However, contrary to outward appearance, it was discovered during the interview that they had experienced persistent conflict during the semester but had chosen not to acknowledge their problems to the university. Final interviews revealed much about the nature of their conflict, reasons for not acknowledging their problems, significant events, shifting roles, problem solving, and creating success within a conflicted situation.

The case of Triad A proved unsettling. Not only was the university unaware of problems, but the problems occurred in the traditional model where they were least expected and where safeguards were in place. Yet, there is much to be learned about how the participants managed the conflict in ways that allowed successful internship.

Communication and support. By all accounts, lack of communication was a persistent problem. As Intern A said, "There was no communication. We just didn't communicate about the internship." In Supervisor A's words, "There was minimal contact with the school." Not only did problems begin early in the

student teaching semester, but the supervisor judged his communication and support to be adequate while the intern and cooperating teacher judged it to be inadequate.

Observations, conferencing, and feedback. The observation process was fraught with problems, beginning with scheduling conflicts. Supervisor A explained, "Time was tight. I sandwiched observations in between other responsibilities." As Teacher A described, "The midterm conference was very difficult because it was given in the middle of the morning during our teaching time." And according to the intern, "When he came to observe, he immediately began filling out forms, without really observing. . . . We only had one conference, the midterm, and it lasted about 15 minutes. . . . He always had to leave, or he was in a hurry." What the intern most wanted and missed was feedback. "I wanted critical feedback. I wanted specific feedback and specific answers to questions about how to handle some things."

Pivotal events. The midterm observation and conference became a significant turning point. As Teacher A explained, at the end of the midterm conference, "the intern and I realized that I moved into a much more critical role. I began coming in much more strongly with my suggestions. . . . Up to this point, I had been just strengthening."

Covering up conflict. With the decision to rely on the cooperating teacher rather than the university supervisor for guidance, there was also a conscious decision to not reveal problems within the triad. As Teacher A explained, at the end of the midterm conference, "I was going to make the call (to the university), but [Intern A] said no. . . . She was doing a great job, and we didn't want to do anything that was going to rock the boat." The intern reasoned, "I tried to make

things as positive as possible, because this semester meant a lot." Teacher A concluded, "The situation with the university supervisor wasn't what [Intern A] and I would have wanted, but it brought us closer. We came to do it ourselves."

Dealing with conflict. Conflict peaked with the midterm conference. Interestingly, the supervisor did not interfere with or threaten the intern's success. Instead, he allowed the cooperating teacher to assume a more active role and withdrew further from the situation. As the intern explained,

> It would be good if the supervisor had a stake, a vested interest. . . in making the intern a better teacher. He gave me wonderful ratings, a wonderful grade, and wonderful comments. But I don't feel like he was there. I don't feel like I was getting honest feedback. . . . Everything I got, I got from [Teacher A]. I got answers to a lot of questions, and that's what I wanted. I got lots of professional experience from [Teacher A], and wonderful support.

In concluding comments, the cooperating teacher explained, "I took over and it was the greatest internship for her."

Rather than bringing their problems to the attention of the university coordinator, participants in Triad A made the decision to keep quiet about their conflict and take matters into their own hands in an effort to assure successful outcomes for the intern. The intern and cooperating teacher took control of the situation and solved their problems by forming a strong dyadic relationship while excluding the supervisor as much as possible. With limited time and interest, the university supervisor willingly withdrew even more from the situation.

Preference, Selection, and Matching

Given results of this study and information gleaned from final interviews, it appears that the key to success, with either traditional or alternative

supervision, is finding the right match for all participants. Much was learned from Triad D, the mismatched participants in the alternative group.

Supervisor D, who had extensive experience with traditional student teaching supervision, was most comfortable with the alternative model. She reported keeping in close contact and having frequent phone conversations. Teacher D, who also had considerable experience with the traditional model of supervision, was somewhat ambivalent about assuming responsibility for intern supervision. Intern D was clear about her preference. "As for this alternative thing, I really didn't like it. . . . It would have felt more comfortable if there had been a university supervisor." Intern D explained,

> I value professor's' opinions. They should know. They have more experience and exposure because of their Ph.D. They know what a lot of people are doing, as opposed to just one classroom. I would have like to have had a supervisor, someone else. . . . I need that connection with the university. That's what I'm paying for, and I don't feel I have it.

Intern D also addressed selection and matching concerns. "I think a university supervisor is needed, but not by random assignment to supervisors." Perhaps the intern's closing comments were most revealing. "I really wish I'd had some more input, someone there for me. Connections shut down. They weren't there. Maybe the problem is that I needed so much."

In stark contrast to Intern D, the other intern in the alternative model spoke often of his preference for the alternative arrangement. He said, "Personally, I work better with just two. . . . It was more natural, more realistic. It was easier, more comfortable, less stressful." But, he warned, "The alternative model requires a cooperating teacher to have regular conference time."

From information offered by interview participants, it seems clear that success is most likely when interns, cooperating teachers, and university supervisors are selected and matched according to their preference and style. Matching should be a two-step process. First, individuals should be matched to their preferred model, either traditional or alternative. Second, as much as possible, all three triad participants should be matched to each other, in much the same way that interns have been matched to cooperating teachers in the past.

Things Missed or Lost

During interviews, participants spoke of things missed or lost in the alternative model of supervision. Some spoke of missing personal aspects. Supervisor D, who had extensive experience with student teacher supervision, said, "I most missed seeing lesson plans. . . . It was difficult in the beginning. I felt the loss of personalities at first. I missed that personal contact." Likewise, Supervisor C remarked, "There was no personal contact on a regular basis. I missed just being there and having that contact."

Others spoke of missing administrative support. Teacher D missed someone to give reminders about due dates. She continued, "I missed the visitor's perspective. There was one less person to give consistent feedback." Similarly, Teacher C expressed concern about lost objectivity. "Maybe there was lost perspective. University supervisors may see the big things, like the forest and the trees." Intern C also wondered about lost administrative support, "someone reminding us of when, what was going on." He also spoke of missing the feedback and evaluation cycle on projects and unit plans. Intern C commented, "I missed the outside influence, partly because of [Teacher C's]

hectic schedule." Intern D missed the university connection and support in many ways, declaring, "I needed a professor to support me!"

Summary of Emerging Themes

Qualitative analysis of interview data provided a better understanding of quantitative findings in this study. Specifically, interview data provided a more comprehensive understanding of how program features and individual characteristics contributed to or limited successful internship outcomes. Statistical analysis of mean scores indicated that interns in both treatment groups made positive growth during the internship semester. Repeated measures analysis of variance (ANOVA) revealed no significant difference between traditional and alternative treatment groups. Importantly, participant interviews revealed common concerns and issues and provided an understanding of how participants created successful outcomes, even in the face of obstacles.

Three themes emerged from interview data as most prominent. First, conflict was a central issue. Specifically, participants spoke of conflict surrounding areas of communication and support, observation, conferencing and feedback, pivotal events, covering up conflict, and dealing with conflict. Second, much attention focused on internship program organization. Specifically, participants offered recommendations and voiced concerns about issues of preference, selection, and matching. Third, participants spoke of things missed or lost with each model of student teacher supervision.

In the following chapter, findings are summarized and conclusions and implications are discussed. Recommendations are presented for future research on supervisory practices of field-based experiences.

# CHAPTER 5
# CONCLUSIONS AND DISCUSSION

Results of statistical analysis of the data did not lead to rejection of any of the null hypotheses. In other words, there was no difference in the rate of progress and professional growth between interns receiving traditional university supervision and interns receiving alternative student teaching supervision. Both models resulted in positive growth over the course of the student teaching semester. This held true for measures of classroom management, time management, instructional management and lesson presentation, and seatwork management competencies.

## Significance of Findings

In light of earlier studies yielding ambiguous and inconclusive results (Johnson, 1987; McIntyre, 1983; McIntyre & Morris, 1980; Metcalf, 1991; Yee, 1969; Zimpher et al., 1980), the findings of this study are neither inconsistent nor surprising. More specifically, findings of this study are consistent with results of Morris' (1974) study, the only other experimental design research to examine effects of eliminating the role of university supervisors in student teaching arrangements. Morris also concluded that there was no significant difference between the classroom performance of student teachers who did and did not receive university supervision.

In this study, examination of the quantitative data reveals interesting answers and at the same time begs perplexing questions. Qualitative data from

interviews with interns, cooperating teachers, and university supervisors contributes to the interpretation of quantitative measures. Together, quantitative and qualitative findings provide the foundation for conclusions, implications, and recommendations for practice and research.

Summary of Quantitative and Qualitative Findings

Quantitative analysis of data revealed no significant difference between treatment groups on rate of progress and professional growth over the course of the student teaching semester. On rating scales assessing seatwork management, instructional management and lesson presentation, time management, and classroom management competencies, mean scores increased for interns in both traditional and alternative treatment groups. Mean scores indicated positive growth over time for both models.

Results of repeated measures analysis of variance (ANOVA) revealed no significant differences between treatment groups on any of the four domains (i.e., seatwork management, instructional management and lesson presentation, time management, and classroom management). Univariate tests of hypotheses for within-subjects effects revealed significant ($Pr > F = 0.0001$) effect due to time on all four domains. Findings did not lead to rejection of null hypotheses. On all four domains, interns who received alternative student teaching supervision scored equally well compared to interns who received traditional university supervision.

For more complete reporting of mean scores by treatment group, refer to Table 5 (seatwork management), Table 7 (instructional management and lesson presentation), Table 9 (time management) and Table 11 (classroom management) in the preceding chapter. Source tables for repeated measures

analysis of variance are reported in Table 6 (seatwork management), Table 8 (instructional management and lesson presentation), Table 10 (time management) and Table 12 (classroom management) in Chapter 4.

Participants in the traditional model reported numerous advantages and benefits of traditional university supervision. They cited help with administrative responsibilities, providing guidance about internship requirements, offering a different perspective and new methods and materials, diffusing and resolving conflict, providing objective feedback based on observational data, and providing the professional opinion of an outsider with a university connection.

Participants in the traditional model identified time demand as the primary limitation of traditional university supervision. They also mentioned conflict created by mismatched triads, lack of administrative support from the university, dealing with an outsider, and conflicting requirements and expectations as being disadvantages of traditional supervision.

Participants in the alternative model cited numerous advantages of the alternative model. They appreciated the increased flexibility and options in meeting requirements, more naturally occurring opportunities for observation and feedback, more spontaneous and naturally occurring teachable moments, the ease and closeness of a two-way relationship, and absence of scheduling conflicts potentially created by an outsider coming in to observe and conference.

Participants in the alternative model missed the university connection and objective opinion of an outsider. Supervisors initially felt a sense of isolation and loss of control. Cooperating teachers cited increased responsibilities with no additional reward. Interns expressed concern about

hectic schedules that potentially preclude cooperating teachers from engaging in reflective practice and conferencing.

Ethnographic analysis of interview data led to identification of emerging themes. Two distinct domains emerged: administrative concerns and personal interactions. Administrative concerns included communication, responsibilities, factors that influence outcomes, and internship program considerations. Personal interactions included functions and roles, perceptions, dealing with conflict, events that change relationships, personalities and revealing language, stress and comfort, and things missed or lost.

For a more complete reporting of advantages and disadvantages identified by participants in traditional and alternative treatment groups, refer to Tables 13 and 14 in the previous chapter. For a complete list of emerging themes and a corresponding frequency matrix, refer to Table 15 in Chapter 4.

## Interpretation of Statistical Results

### Interpretation of Group Mean Scores

Means for group. On all domains (i.e., classroom management, time management, instructional management and lesson presentation, and seatwork management), statistical analysis revealed positive growth over time for both treatment groups. Mean scores increased for both alternative and traditional treatment groups during the course of the student teaching semester. Statistical analysis of mean scores revealed no differences between models.

Comparison of means for traditional and alternative treatment groups. On three of the four domains (i.e., classroom management, time management, and instructional management and lesson presentation) mean scores for interns in the alternative treatment group increased on each of six successive measures.

However, mean scores for interns in the traditional treatment group increased on the first five measures but declined slightly on the sixth measure.

This phenomenon could be random and insignificant. At the same time, a review of the literature offers other possible explanations. Much has been written about the overriding influence of cooperating teachers on student teachers, an issue raised by the Holmes Group in their report, *Tomorrow's Teachers* (1986). For example, Richardson-Koehler (1988) found that within the first 2 weeks, student teachers tended to discount previous knowledge from university coursework and relied on learning to teach through the experience of teaching. Within a month, most student teachers attributed their cooperating teacher as the source of classroom practice, a trend that also became evident in the present study.

Metcalf (1991) observed that student teachers tended to imitate the practices of cooperating teachers, regardless of approval or disapproval of their university supervisor. Furthermore, Metcalf asserted that university supervision had no effect on student teaching practice. Student teachers demonstrated a tendency to accept what others regard as appropriate or commendable, leading to an acceptance of current situations and practices as natural, correct, essentially unalterable, and beyond criticism (Beyer, 1984).

Lower scores given by university supervisors on final measurements may be explained, in part, by discrepancies in evaluative judgements between university supervisors and cooperating teachers. As Zeichner (1980) and Levine (1992) pointed out, the opposing forces of schools and universities create conflicts within the structure of student teaching experiences, often to

such an extent that what the student teachers actually learn sometimes runs contrary to the expressed intentions of both the schools and the university.

Student teachers' failure to transfer skills learned in university coursework to classroom teaching has been a persistent problem (Holmes Group, 1986; Peterson & Hudson, 1989). Lower scores assigned by university supervisors may have been a reflection of differences between the university supervisors' and the cooperating teachers' notion of effective teaching practices. In the present study, it became apparent that university supervisors and cooperating teachers may have differing notions of effective teaching practices. In that case, they would differ in their assessment of the intern's teaching skills and practices, possibly explaining the lower scores assigned by university supervisors at the end of the semester, when interns' teaching practices are most closely aligned with their cooperating teacher's practices. Further evidence of this phenomenon is supported by Richardson-Koehler (1988), who found that half of the cooperating teachers felt the need to protect their student teachers from the university supervisor's assessment during the final evaluative session.

Interpretation of Inferential Statistics

On all four domains (i.e., classroom management, time management, instructional management and lesson presentation, and seatwork management) repeated measures analysis of variance (ANOVA) revealed no significant between-subjects effects, but revealed significant ($Pr > F = 0.0001$) effect due to time on univariate test of hypotheses for within-subjects effects. Statistical analyses indicated that interns who received alternative student

teaching supervision performed equally well on all domains compared to interns who received traditional university supervision.

## Implications for Supervisory Practices

Results of this study suggest that traditional and alternative models of student teacher supervision can be equally effective in promoting professional growth of interns. Outcomes of this study present numerous implications for supervisory practice of student teachers. In turn, the implications raise questions, concerns, and potential issues to be addressed.

### Benefits of Traditional Models of Supervision

Much has been written about the benefits of traditional models of student teacher supervision. More than three decades ago, Bennie (1964) documented university supervisors as a major source of help and influence. It has been noted that university supervisors also provide direction for requirements, evaluation, and assessment of the student teacher's field-based experience (Pierce & Miller, 1994; Slick, 1998; Zimpher et al., 1980). Additionally, they enhance informational communication among participants of the student teaching triad (Veal, 1998). Although university supervisors tend to be frustrated by the perceived lack of influence on student teachers' classroom practices, university supervisors often appear to be the only ones making critical contributions to the student teacher's progress. Eliminating the role of the university supervisor would mean those functions would either not be fulfilled at all or would be assumed by someone else; yet, many of those functions require input from someone in a role outside the school setting (Slick, 1998; Zimpher et al., 1980).

University supervisors fill a critical role in administrative, managerial, and interpersonal dimensions of field experiences (Metcalf, 1991; Veal, 1998) and by acting as consultants and providing suggestions for solving problems (Johnson, 1987). University supervisors provide evaluative feedback, offer support, recommend strategies for improvement, and provide positive reinforcement (Potthoff & Kline, 1995). University supervision is perceived by student teachers to be most beneficial when it is evaluative, supportive, and provides suggestions for improvement (Johnson, 1987).

Benefits of Alternative Models of Supervision

Given the lack of commitment from higher education, the lack of support for costly and time consuming supervision of student teachers, the lack of time for supervising faculty to become significantly involved in field-based experiences (Buck et al., 1992; Holmes Group, 1986; Johnston & Hodge,1981; Morris, 1974; Pierce & Miller, 1994; Yee, 1968), the low status of supervising faculty (Fulwiler, 1996; Hoover et al., 1988; Morris, 1974; Slick, 1998; Warger & Aldinger, 1984; Yee, 1968), the conflict between school and university demands (Fulwiler, 1996; Levine, 1992; Richardson-Koehler, 1988; Warger & Aldinger, 1984), and the lack of connection between university coursework and field experiences (Holmes Group, 1986; McIntyre, 1983; Schuster & Stevens, 1991), it is evident that alternative models of student teacher supervision offer numerous benefits. In addition, traditional models of student teacher supervision tend to be ambiguous in purpose (O'Shea, 1987; Warger & Aldinger, 1984), lack clearly defined roles for members of the student teaching triad (Hoover et al., 1988; Johnston & Hodge, 1981; Metcalf, 1991; Morris, 1974; O'Shea, 1987; Richardson-Koehler, 1988; Warger & Aldinger, 1984), provide

little control over both desired and undesired sources of influence (Richardson-Koehler, 1988; Slick, 1998), are of questionable benefit (Emans, 1983; McIntyre, 1983; Metcalf, 1991; Richardson-Koehler, 1988; Zahorik, 1988; Zeichner, 1980), and lack empirical validation (Johnson, 1986).

Dyadic rather than triadic arrangements are typically preferred in effective interpersonal relationships (Boydell, 1986; Emans, 1983; Veal, 1998; Yee, 1968). In fact, student teaching triads often seek greater dyadic balance at the cost of diminished triadic cohesiveness (Yee, 1968). In this study, that appeared to hold true for both traditional and alternative models of supervision.

The inclusion of a university supervisor unwittingly creates a threesome, potentially creating a competitive rather than cooperative relationship (Emans, 1983). Furthermore, lacking formal status in the classroom, university supervisors often defer to cooperating teachers (Warger & Aldinger, 1984). Alternative models in which the cooperating teacher assumes primary responsibility for supervision offer the advantage of dyadic arrangements.

Observational learning, a major tenant of social learning theory, is more likely to occur with increased mentoring opportunities (Bandura, 1977; Daloz, 1986). Observational learning is essential in situations where errors are costly and risks are unacceptable. When complex behaviors can only be conveyed effectively by social cues, modeling is an indispensable means of skill acquisition. However, skill mastery is not achieved through observational learning alone. Through modeling, learners approximate the target behavior, then rely on feedback, self-corrections, and focused demonstration of specific behavior segments not yet mastered (Bandura, 1977).

As cooperating teachers assume additional responsibility for mentoring student teachers in alternative models, it is likely that increased time and exposure will provide more frequent and more effective learning opportunities. Whether anticipated by participants in the traditional model or realized by participants in the alternative model, flexibility, spontaneity, and increased learning opportunities were valued and perceived as a major strength of the alternative model of supervision.

Considerations

The right match. Concerns about selection of cooperating teachers and classroom settings are well documented in traditional models of field-based experiences. Likewise, selection considerations are of primary importance in alternative models of student teaching supervision (Schuster & Stevens, 1991). Numerous studies (Johnson, 1986; Slick, 1998) confirm the variable influence of cooperating teachers. As Bandura (1977) pointed out, not all models are equally effective in influencing behavior, nor are all learners equally responsive to modeling cues. People differ in the extent to which their behavior influences and is influenced by modeling. A quarter century later, those assertions still have relevance. In this study, it was evident that university supervisors and cooperating teachers differed in the extent to which they influenced behavior, just as student teachers differed in the extent to which their behavior was influenced by modeling.

As Daloz (1986) emphasized, effective mentoring relationships are dependent on mutual participation of both cooperating teacher and student teacher. As proteges, student teachers must actively seek to become self-reliant. As mentors, cooperating teachers must possess knowledge, wisdom,

and competency, must be expert teachers, and must distinguish novice from expert thinking. Although effective mentors must be expert teachers of children, it does not necessarily follow that all expert classroom teachers will be effective mentors of adult learners. Therefore, selection of participants, both cooperating teachers and student teachers, is critical in alternative models.

Selection, training, and evaluation. Adequate training for cooperating teachers always has been, and remains, a primary consideration (Schuster & Stevens, 1991). As Buck et al. (1992) cautioned, careful consideration must be given to the selection, training, and evaluation of cooperating teachers. With cooperating teachers assuming increased responsibility in alternative models of supervision, concerns about adequate selection, training, and evaluation assume increased importance. Apparently of great importance to all involved in this study, the issue of selection was raised by interns, cooperating teachers, and university supervisors, and by participants in both traditional and alternative models. Training issues were raised by participants in both traditional and alternative models, and by both cooperating teachers and university supervisors.

Administrative roles. Studies of traditional models of student teaching supervision have pointed to the importance of the roles of university supervisors. It is generally accepted that university supervisors play a critical role in administrative, managerial, and interpersonal dimensions of field experiences (Metcalf, 1991).

In the only other experimental design study of successful student teacher supervision by cooperating teachers, Morris (1974) emphasized the importance of maintaining university supervisors in administrative roles. Findings of this

study are consistent with Morris' recommendations: maintain university supervisors to serve as liaisons, to be available for counseling with participants as needed; implement and evaluate new methods of assessment, such as audiotapes and videotapes, interaction analysis; and provide in-service consultation for school personnel.

Essential responsibilities for university supervisors in alternative models emerge from this study and from Morris' (1974) earlier study. University supervisors fill the critical role of relating to teachers, supervisors, and administrators. They oversee administrative matters, coordinating between university and school. They also provide feedback about the student teaching program to their respective college of education.

In this study, supervisors in the alternative model spoke of the importance of their administrative roles. Based on their accounts, the roles they assumed were similar, regardless of whether or not there were problems with internship. Even without direct involvement, the supportive protocol and flexibility of the alternative model provided options for assuring success.

Issues and Concerns

When considering alternative models in which cooperating teachers assume primary responsibility for supervision of student teachers, a major concern is the potential for merely perpetuating the status quo in classroom teaching practices (Beyer, 1984; Holmes Group, 1986; McIntyre, 1983; Pugach, 1992; Zahorik, 1988; Zeichner, 1980). In the absence of influence from university supervisors, student teachers may be more likely to assume values, meanings, and commitments compatible with utilitarian teaching perspectives (Beyer, 1984). Because cooperating teachers tend to be more oriented toward

the practical and particular rather than toward theory and generalizations, student teachers may miss the more general principles that allow adjustment to diverse teaching situations (Richardson-Koehler, 1988).

Careful program design can minimize these risks and provide opportunity to monitor field-based experiences without direct involvement of university personnel. In this study, safeguards were incorporated into procedures and requirements. In the event that the university supervisor found reason for concern, procedures were in place for intervening and addressing the problem. Potential problems could be identified immediately and intervention could be provided promptly.

## Recommendations

Findings of this study demonstrate that participants are able to create successful internship outcomes, even in the face of adversity, by drawing on personal and professional resources. Three considerations emerge as being essential to successful implementation of both traditional and alternative models of supervision. First, appropriate selection and matching of participants deserves careful attention. Second, successful outcomes are dependent on thorough training and evaluation of all participants. Third, a carefully planned and comprehensive protocol is essential to successful implementation of alternative models of student teacher supervision.

### Selection and Matching

Results of this study suggest that traditional and alternative models of student teacher supervision can be equally effective, or equally ineffective. Participants were quite clear in their interviews that appropriate selection and matching is critical to successful outcome.

First, all participants (i.e., university supervisors, cooperating teachers, and student teachers) should have a voice in whether they are assigned to traditional or alternative supervision. Personal preference should be the primary consideration in selecting participants for traditional or alternative arrangements.

Following selection and assignment to either traditional or alternative model, as much as possible, personal style should be considered when matching participants (i.e., university supervisors, cooperating teachers, and student teachers) to form triads. Personal style can be assessed with relative ease. University coordinators typically know incoming interns from prior practicum experiences and university coursework. Likewise, university coordinators know veteran cooperating teachers from previous field placements and are acquainted with novice cooperating teachers from classroom visits. University supervisors are typically peer faculty members. Therefore, the university coordinator can exercise some discretion in matching triad participants. More importantly, simple self-rating questionnaires can be used to informally assess personal styles. Factors to consider include preferences for direction versus independence, external influence versus self-motivation, degree of attention and support provided or needed, and expectations about the student teaching semester. Matching participants by style preference increases the likelihood of successful outcomes and rewarding experiences.

Training and Evaluation

Findings of this study support the assumption that adequate preparation contributes to successful outcomes while inadequate preparation leads to

frustration and struggle within the triad. Adequate training and evaluation of all participants is critical to successful outcome.

University coordinators typically offer orientation and training sessions for both university supervisors and cooperating teachers. However, time demands and scheduling conflicts often discourage or prevent full attendance. In order to assure full participation of all supervisors and all cooperating teachers, orientations should be offered on multiple occasions and in multiple locations. In addition, supervised childcare arrangements should be offered on at least one occasion. Because novice participants require more time, more detailed explanation, and have more questions, their orientation should be held separately. Also, because procedures and requirements change, veteran participants should have refresher orientation and training each semester, held separately from sessions for novice participants. Importantly, cooperating teachers should receive an honorarium.

To assure comprehensive program assessment, all participants should be evaluated. Each member of the triad should evaluate the other two members. Evaluation should be administered by the university coordinator and should be completed at the end of the student teaching semester.

Protocol

A carefully planned and comprehensive protocol is critical to successful implementation of alternative models of student teacher supervision. The protocol must go beyond steps for completing assignments and meeting requirements. It must include guidelines for problem prevention and intervention, specifying a chain of command for seeking help or alerting the university to potential problems. Student teachers and cooperating teachers

should be informed of when and how to seek help. University supervisors should be informed of when and how to intervene. If intervention within the alternative model is not immediately successful, then procedures should be in place for reverting to more intensive traditional models of supervision. A comprehensive protocol should prevent potential problems and provide a framework for more intensive intervention of unresolved problems.

## Summary Statements

The following summary statements are an outgrowth of the synthesis and analysis of quantitative and qualitative findings of this study.

1. Traditional and alternative models of student teacher supervision can be equally effective or equally ineffective.

2. Participants are able to create successful internship outcomes, even in the face of adversity, by drawing on personal and professional resources.

3. Successful internship experiences are most likely when participants are allowed to select either traditional or alternative model based on personal style and preference.

4. Successful internship experiences are most likely when participants are matched within triads according to personal style and preference.

5. Mandatory comprehensive orientation and training for novice participants and mandatory refresher orientation and training for veteran participants is critical to successful internship outcomes.

6. A comprehensive and carefully designed procedural protocol, including guidelines for problem prevention and intervention, is critical to successful internship outcomes.

## Implications for Further Research

Further research on models of student teacher supervision is indicated by the outcome of this study. Findings of this study are strengthened by and also support Morris' earlier research on alternative models of student teacher supervision. Results of this study provide a wealth of information, yet, at the same time, raise numerous questions.

An area in need of further examination is the question of participant selection and matching, specifically, whether choice enhances outcomes. In this study, efforts were made to match interns and cooperating teachers by personal style. University supervisors were assigned by area of expertise. For purposes of this study, triads were then randomly assigned to either traditional or alternative supervision. Future research is needed to examine the benefit of allowing participants to select traditional or alternative supervision based on personal preference.

Additional qualitative research is needed to better understand the process of conflict management and problem solving that occurs spontaneously among student teaching triads. In this study, troubled triads differed significantly in the way they went about managing conflict and solving problems. Better understanding of their decision-making process and actions could inform administrators and coordinators about effective prevention and intervention strategies.

Most importantly, perhaps, the feasibility of implementing alternative models of student teacher supervision in distance learning programs needs to be examined. Results of this study suggest that, when carefully implemented, alternative models of student teacher supervision can be as effective as

traditional models of university supervision. If that holds true, then alternative supervision in distant field placements opens tremendous potential for teacher education programs. Alternative supervision of field-based experiences in distance programs could be the key to growing student numbers while local resources remain limited. Alternative supervision could be part of the solution to meeting critical teacher shortage. Implementation of alternative models in distance placements needs to be accompanied by careful study and further research. Further research on alternative supervision of student teachers will validate the findings of this study.

# APPENDIX A
# TEACHING EFFECTIVENESS RATING SCALES: CONSTRUCT VALIDATION LITERATURE REVIEW

Construct Validation Literature Review

Englert, C. S., Tarrant, K. L., & Mariage, T. V. (1992). Defining and redefining instructional practice in special education: Perspectives on good teaching. Teacher Education and Special Education, 15(2), 62-86.

Classroom Management

| *Assumption* | *Supporting Literature* | *Indicators of Effective Teaching* |
|---|---|---|
| Effective classroom managers clearly state and actively teach classroom rules. They follow through on their expectations by reminding students of rules, monitoring compliance, and providing appropriate and timely consequences for behavior. | Anderson, Evertson, & Emmer, 1980;<br>Brophy, 1983;<br>Brophy & Good, 1986;<br>Doyle, 1986. | Arrange minimally disruptive traffic patterns.<br>Create rules and procedures related to instructional and noninstructional events.<br>Establish rules of respect for others.<br>Clearly state in advance what behavior will and will not be tolerated.<br>Introduce rules, procedures, and consequences (e.g., state and post rules, provide and discuss rationale, define specific contexts within which rules apply).<br>Demonstrate acceptable behavior by presenting examples and nonexamples of target behavior.<br>Rehearse rules and procedures, monitoring compliance and providing feedback.<br>Quickly follow through with consequences.<br>Use specific praise contingently. |

| | | |
|---|---|---|
| Effective teachers scan the classroom and monitor student behaviors, rarely making target or timing errors. | Kounin, 1970. | Position self in classroom to provide high degree of visibility.<br>Scan classroom frequently.<br>Use nonverbal signals to redirect disruptive behavior. |
| Effective classroom management practices are enhanced when teachers provide instruction that promotes students' cognitive control over their cognitive and social behavior. | Anderson, Stevens, Prawat, & Nickerson, 1988;<br>Manning, 1988. | Include students in management of their own behavior; provide cues for self-regulation.<br>Provide behavioral corrections to students, indicating how they can control themselves. |

Construct Validation Literature Review

Englert, C. S., Tarrant, K. L., & Mariage, T. V. (1992). Defining and redefining instructional practice in special education: Perspectives on good teaching. Teacher Education and Special Education, 15(2), 62-86.

Instructional Management/Lesson Presentation

| *Assumption* | *Supporting Literature* | *Indicators of Effective Teaching* |
|---|---|---|
| Effective teachers maintain a brisk pace and a success rate between 70-90% during teacher-led instructional activities. They confirm correct responses, and provide error corrections or prompts until the student achieves a successful response. Effective teachers attempt to improve students' responses through questioning and support, rather than by providing the correct answer or calling on another student. At the conclusion of the lesson, they review missed concepts, summarize the day's lesson, and forecast upcoming lesson content. | Rosenshine & Stevens, 1986. | Maintain high success rate in teacher-led activities (70-90% accuracy).<br>Provide error correction procedures, using prompting or modeling, rather than telling the answer.<br>Provide error drill on missed concepts during and at the conclusion of each lesson.<br>Give summary of lesson content and integrate lesson content with content of other lessons or experiences.<br>Summarize accomplishments of individuals and group.<br>Forecast upcoming lesson content. |

| | | |
|---|---|---|
| Effective teachers actively teach content. They introduce and orient by reviewing previous content; present advance organizers for new content; build students' background knowledge in related content areas; connect new with existing knowledge; and provide organizational frameworks to help students integrate and associate information. | Brophy, 1983;<br>Ellis, Deshler, Lenz, Schumaker, & Clark, 1991;<br>Lenz, Bulgren, & Hudson, 1990. | Provide review of previous lesson concepts at beginning of lesson; actively test students' understanding and retention of previous day's lesson content.<br>Provide clear overview of the lesson, and tell students what they will be accountable for knowing or doing.<br>State purpose and objective(s) of lesson.<br>Introduce topic, activate prior experiences and knowledge relevant to the topics, strategies, or skills to be learned.<br>Relate lesson topics, concepts, or strategies to other concepts, strategies, and existing knowledge.<br>Provide organizational framework to help students organize new information. |

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| Effective teachers actively model and demonstrate concepts, learning strategies, and procedures related to effective problem-solving in the content area. When new concepts are presented, they use examples and nonexamples to illustrate relevant dimensions of the concept. They provide students with insights into the cognitive and metacognitive processes, and the self-mediation that directs one's cognitive performance. They present and summarize the rationale for learning specific strategies, including what the strategy is, how to perform the strategy, when the strategy can be used, why the strategy is important, and how it can be adapted. | Anderson, Raphael, Englert, & Stevens, 1991;<br>Ellis, Deshler, Lenz, Schumaker, & Clark, 1991;<br>Manning, 1988;<br>Pressley, Goodchild, Fleet, Zajchowski, & Evans, 1989;<br>Roehler & Duffy, 1984. | Point out distinctive features of new concepts; use examples and nonexamples to show relevant and irrelevant features of the concept.<br>Model task-specific learning strategies and self-talk to help students achieve.<br>Summarize strategy; tell students how to perform the skill/strategy, when it can be used, and why it will be beneficial to students.<br>Point out organization, relationships, and clues in learning material that elicit learning strategies. |

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|---|---|---|
| Effective teachers continually monitor progress to ensure mastery. They provide daily, weekly, and monthly reviews to enhance and evaluate retention. They utilize curriculum-based assessment to monitor achievement gains for difficult-to-teach students, measure and chart academic progress, inform students of their progress, and make instructional decisions and program changes. They involve students in instructional goal setting. Effective teachers teach students to generalize knowledge across settings, situations, and conditions. | Deno & Fuchs, 1987;<br>Ellis, Deshler, Lenz, Schumaker, & Clark, 1991;<br>Ellis, Lenz, & Sabornie, 1987a, 1987b;<br>Lenz, Bulgren, & Hudson, 1990;<br>Reith & Evertson, 1988. | Explain assignment/evaluation criteria and how assignments are to be completed.<br>Provide daily, weekly, and monthly reviews.<br>Maintain continuous records and graphs of students' performance.<br>Communicate results of evaluation activities to students.<br>Reteach or make instructional decisions on the basis of student performance; use data decision rules to change instruction in a timely way.<br>Involve students in setting instructional goals.<br>Instruct students to generalize and apply knowledge across settings, situations, and conditions. |
| Effective teachers check for understanding by asking frequent questions that engage students, monitor student understanding, and provide rehearsal of concepts and strategies. Because active responding promotes learning, effective teachers engage students by calling on all students equally and eliciting overt responses. | Lenz, Bulgren, & Hudson, 1990;<br>Rosenshine & Stevens, 1986. | Provide frequent questions to evaluate concept mastery; repeat practice opportunities until students are not making errors.<br>Require overt and active participation. |
| Effective teachers maintain a balance between movements through the curriculum and high levels of accuracy and mastery. | Bickel & Bickel, 1986. | Deliver instructional cues and prompts to maintain high accurate responding. |

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| Effective teachers maintain a brisk pace through the curriculum, as represented by the number of questions asked, sight words presented, text pages covered per day, week, or month. | Bickel & Bickel, 1986. | Maintain brisk pace during lesson. |

Construct Validation Literature Review

Englert, C. S., Tarrant, K. L., & Mariage, T. V. (1992). Defining and redefining instructional practice in special education: Perspectives on good teaching. Teacher Education and Special Education, 15(2), 62-86.

Seatwork Management

| *Assumption* | *Supporting Literature* | *Indicators of Effective Teaching* |
|---|---|---|
| Effective teachers closely monitor seatwork performance by circulating to assist students, giving feedback and encouragement, and providing additional instruction. | Fisher, Berliner, Filby, Marliabe, Cohen, Dishaw, & Moore, 1980. | Circulate frequently among seatwork students to assist and monitor progress. |
| Effective teachers plan for high rates of student accuracy (90-100%) on seatwork tasks, particularly for low achievers and at-risk students by providing work at the appropriate level of difficulty. | Fisher, Berliner, Filby, Marliabe, Cohen, Dishaw, & Moore, 1980. | Maintain seatwork accuracy at high rates (e.g., 90% level or higher). |
| Effective teachers select seatwork to provide active rather than passive responding, and choose independent activities that are closely matched to the targeted academic goal. | Fisher, Berliner, Filby, Marliabe, Cohen, Dishaw, & Moore, 1980. | Provide active forms of seatwork practice clearly related to academic goals. |

| | | |
|---|---|---|
| Effective teachers ensure students understand the purposes and strategies for performing independent seatwork tasks in order to minimize the likelihood that students will develop maladaptive strategies to complete the task, or perceive the goal to be finishing the assignment rather than developing competence and understanding. They provide a rationale for the assignment and evaluate students' understanding of the cognitive processes that underlie the seatwork task. | Anderson, Brubaker, Alleman-Brooks, & Duffy, 1985;<br>Bennett & Desforges, 1988. | Tell rationale for seatwork and communicate importance of the assignment (e.g., what the assignment is, how to do it, why it is important, and when the skill/strategy can be used).<br>Evaluate student understanding of seatwork tasks and cognitive processes by asking students "what, how, when, why" questions related to the targeted skill or strategy.<br>Actively model strategies and procedures for completing seatwork assignments. |
| Effective teachers have accountability procedures to ensure that students know when work is due and what criteria will be applied to its evaluation. Seatwork tasks are followed by appropriate feedback and instruction. | Fisher, Berliner, Filby, Marliabe, Cohen, Dishaw, & Moore, 1980. | Hold students accountable for seatwork assignments by setting assignment standards (neatness, accuracy, due dates), by communicating those standards to students, and by requiring students to correct work and make up missed or incomplete assignments.<br>Provide informative feedback to students in making written or verbal corrections.<br>Minimize time spent on independent seatwork and maximize time spent in direct teaching, small group, peer tutoring or cooperative group arrangements. |

Construct Validation Literature Review

Englert, C. S., Tarrant, K. L., & Mariage, T. V. (1992). Defining and redefining instructional practice in special education: Perspectives on good teaching. Teacher Education and Special Education, 15(2), 62-86.

Time Management

| *Assumption* | *Supporting Literature* | *Indicators of Effective Teaching* |
|---|---|---|
| Effective teachers manage the school day to provide ample instructional time, and maintain high task engagement during instruction. Increased instructional time affects achievement, since learning, remembering, thinking, and problem solving take time. | Gage & Needels, 1989. | Allocate generous time for instruction, limiting time spent on behavior management, recess, and nonacademic activities and talk.<br>Gain and maintain students' attention during instruction at 90% level.<br>Establish seatwork procedures for early finishers and students needing help. |
| Effective teachers protect themselves and their students from intrusions by carefully structuring and communicating their expectations for lessons, transition times, and seatwork. | Good, 1983. | Keep transition time between lessons as short as possible.<br>State expectations for seatwork and transitions in advance.<br>Establish clear lesson routines that signal a clear beginning and end.<br>Prepare students for transitions in advance by stating behavioral expectations and informing students that lesson is concluding. |

| | | |
|---|---|---|
| Effective teachers establish rules and procedures that reduce the time lost to disruptive behavior, student confusion about what is expected, and transition times. | Good, 1983. | Monitor seatwork and use nonverbal signals to provide corrections.<br>Monitor transitions by scanning and circulating among students.<br>Require student rehearsal of rules and procedures; monitor rule compliance, and provide feedback during rehearsal. |

# APPENDIX B
# RATING SCALES FOR STUDENT TEACHER PERFORMANCE

**Attention: Cooperating Teachers and University Supervisors !!**

From: Ann Dillon, Special Education Internship Coordinator

Date: August 22, 1994

Re: Revised rating scale for biweekly checklists

This semester we are modifying the rating scale used for the interns' biweekly performance checklists. Rather than using a rating scale of 1 to 5 ('not displayed' to 'excellent') as printed on the triplicate forms, we are using a rating scale of 1 to 7 ('no evidence; needs immediate intervention' to 'outstanding; competency level expected of a beginning teacher'). You will notice that in addition to an expanded scale, the descriptions are rephrased as well. Because professional growth as an educator is a gradual process occurring over time, we anticipate that this expanded and rephrased scale will offer increased opportunities and flexibility in documenting your intern's progress during the course of the semester.

Below you will find the revised rating scale to be used Fall semester, 1994. **Please be sure to keep this revised rating scale for your reference throughout the semester. It is to be used when filling out all biweekly checklists.**

* * * * * * * * * * * * * *

**Revised Rating Scale for Student Teacher Performance**

RATING SCALE

7 - Outstanding (Competency level expected of a beginning teacher)
6 - Excellent
5 - Very good
4 - Average (Competency level expected of a beginning intern)
3 - Needs improvement
2 - Needs much improvement
1 - No evidence of competency (Needs immediate intervention)
N/O - No opportunity to observe; not able to evaluate

Date _____

Intern _____ Teacher _____

School _____ Class/Subject _____

**Rating Scale for Student Teacher Performance**

RATING SCALE

7 - Outstanding (Competency level expected of a beginning teacher)
6 - Excellent
5 - Very good
4 - Average (Competency level expected of a beginning intern)
3 - Needs improvement
2 - Needs much improvement
1 - No evidence of competency (Needs immediate intervention)
N/O - No opportunity to observe; not able to evaluate

**CLASSROOM MANAGEMENT**

| Competency | Rating | Comments |
|---|---|---|
| Arranges physical space to maintain minimally disruptive traffic patterns and procedures. | ___ | |
| Creates rules and procedures for noninstructional events (e.g., movement about room, student talk, distributing materials, bathroom use, etc.). | ___ | |
| Creates rules and procedures related to instructional events (e.g., getting ready for lessons, expected behavior of the instructional group, obtaining help, seatwork procedures, out-of-seat procedures, etc.). | ___ | |
| Establishes rules that involve respect for other members of the class and provides verbal reminders to students about how to treat others. | ___ | |
| Clearly states in advance what behavior will be tolerated and what will not. | ___ | |

| | |
|---|---|
| Introduces rules, procedures, and consequences (e.g., states rules, posts rules, gives rationale for rules, provides discussion of rules, defines specific contexts within which rules apply; states consequences in advance. | ___ |
| Demonstrates what behavior is acceptable by presenting examples and nonexamples of the target behavior. | ___ |
| Requires student rehearsal of rules and procedures; monitors rule compliance, and provides feedback during rehearsal. | ___ |
| Consequates rule noncompliance quickly; cites rule or procedure in responding to disruptive behavior. | ___ |
| Positions self in the room to provide high degree of visibility (e.g., can make eye contact with all students). | ___ |
| Scans class frequently. | ___ |
| Uses nonverbal signals whenever possible to direct students in a nondisruptive manner when teaching other groups of students. | ___ |
| Administers praise contingently, and uses specific praise statements. | ___ |
| Includes students in the management of their own behavior and cues self-regulation (e.g., self-monitoring, self-charting, self-evaluating). | ___ |
| Provides behavioral corrections to students that indicate how they can control themselves. | ___ |

Date _____

Intern _____ Teacher _____

School _____ Class/Subject _____

**Rating Scale for Student Teacher Performance**

RATING SCALE

7 - Outstanding (Competency level expected of a beginning teacher)
6 - Excellent
5 - Very good
4 - Average (Competency level expected of a beginning intern)
3 - Needs improvement
2 - Needs much improvement
1 - No evidence of competency (Needs immediate intervention)
N/O - No opportunity to observe; not able to evaluate

**INSTRUCTIONAL MANAGEMENT AND LESSON PRESENTATION**

| Competency | Rating | Comments |
|---|---|---|
| Provides review of previous day's concepts at beginning of lesson; actively tests students' understanding and retention of previous day's lesson content. | ___ | |
| Provides a clear overview of the lesson (explains task in terms of teachers' and students' actions) and tells students what they will be accountable for knowing or doing. | ___ | |
| States the purpose and objective(s) of the lesson. | ___ | |
| Introduces topic(s) of the learning task, and activates prior experiences and knowledge relevant to the topics, strategies, or skills to be learned. | ___ | |
| Relates lesson topics, concepts or strategies to other concepts, strategies, and existing knowledge. | ___ | |

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| Provides an organizational framework that will help students organize the lesson information (e.g., text structure genre, diagram of lesson topics and subtopics, concept maps, semantic web, etc.). | ___ |
| Points out distinctive features of new concepts and uses examples and nonexamples to show relevant and irrelevant features of the concept. | ___ |
| Models task-specific learning strategies and self-talk that will help students achieve (e.g., rehearsal strategies, retrieval strategies, etc.). | ___ |
| Summarizes or tells students what the lesson strategy is; how to perform the skill/strategy; when it can be used (in what contexts and under what conditions), why it will be beneficial to students (what learning outcomes will result), and how it can be adapted. | ___ |
| Points out organization, relationships, and clues in learning material that elicit learning strategies. | ___ |
| Provides frequent questions to evaluate students' mastery of lesson concepts; repeats practice opportunities until students are not making errors. | ___ |
| Requires overt and active participation (reading text aloud, writing a response, collaborating with peers). | ___ |
| Maintains a brisk pace during the lesson. | ___ |
| Delivers instructional cues and prompts to maintain high accurate responding. | ___ |
| Maintains high success rate in teacher-led activities (70-90% accuracy). | ___ |
| Provides error correction procedures, using prompting or modeling following errors rather than telling the answer. | ___ |

| | |
|---|---|
| Provides error drill on missed concepts during and at the end of each lesson. | ___ |
| Gives summary of the lesson content and integrates lesson content with content of other lessons or experiences. | ___ |
| Summarizes the lesson accomplishments of individuals and group. | ___ |
| Tells assignment/evaluation criteria and explains how assignments are to be completed. | ___ |
| Forecasts upcoming lesson content. | ___ |
| Provides daily, weekly, and monthly reviews. | ___ |
| Maintains continuous records and graphs of students' performance. | ___ |
| Communicates results of evaluation activities to students. | ___ |
| Reteaches or makes instructional decisions on the basis of students' performance; uses data decision rules to change instruction in a timely way. | ___ |
| Involves students in setting instructional goals. | ___ |
| Instructs students to generalize and apply knowledge across settings, situations, and conditions. | ___ |

Date _____

Intern _____ Teacher _____

School _____ Class/Subject _____

**Rating Scale for Student Teacher Performance**

RATING SCALE

7 - Outstanding (Competency level expected of a beginning teacher)
6 - Excellent
5 - Very good
4 - Average (Competency level expected of a beginning intern)
3 - Needs improvement
2 - Needs much improvement
1 - No evidence of competency (Needs immediate intervention)
N/O - No opportunity to observe; not able to evaluate

**SEATWORK MANAGEMENT**

| Competency | Rating | Comments |
|---|---|---|
| Circulates frequently among seatwork students to assist students and to monitor progress. | ____ | |
| Maintains seatwork accuracy at high rates (e.g., 90% level or higher). | ____ | |
| Provides active forms of seatwork practice clearly related to academic goals. | ____ | |
| Tells rationale for seatwork and communicates the importance of the assignment (what the assignment is, how to do the assignment, why it is important and when the skill/strategy can be used. | ____ | |
| Evaluates students' understanding of seatwork tasks and cognitive processes by asking students "what, how, when, why" questions related to the targeted skill or strategy. | ____ | |
| Actively models strategies and procedures for completing seatwork assignments. | ____ | |

| | |
|---|---|
| Holds students accountable for seatwork assignments by setting assignment standards (neatness, accuracy, due dates), by communicating those standards to students, and by requiring students to correct work and make up missed or incomplete assignments. | ___ |
| Provides informative feedback to students in making written or verbal corrections. | ___ |
| Minimizes time students spend on independent seatwork and maximizes time students spend in direct teaching, small group, peer tutoring or cooperative group arrangements. | ___ |

Date _____

Intern _____ Teacher _____

School _____ Class/Subject _____

**Rating Scale for Student Teacher Performance**

RATING SCALE

7 - Outstanding (Competency level expected of a beginning teacher)
6 - Excellent
5 - Very good
4 - Average (Competency level expected of a beginning intern)
3 - Needs improvement
2 - Needs much improvement
1 - No evidence of competency (Needs immediate intervention)
N/O - No opportunity to observe; not able to evaluate

**TIME MANAGEMENT**

| Competency | Rating | Comments |
|---|---|---|
| Allocates generous amounts of time for instruction (limits time spent on behavior management, recess, and nonacademic activities and talk). | ___ | |
| Keeps transition time between lessons short as possible. | ___ | |
| States expectations for seatwork and transitions in advance. | ___ | |
| Establishes clear lesson routines that signal a clear beginning and end. | ___ | |
| Gains students' attention at the beginning of the lesson and maintains attention during instruction at 90% level. | ___ | |
| Prepares students for transitions in advance by stating behavioral expectations and informing students that lesson is drawing to a close. | ___ | |

| | |
|---|---|
| Monitors transitions by scanning and circulating among students. | ___ |
| Requires student rehearsal of rules and procedures; monitors rule compliance, and provides feedback during rehearsal. | ___ |
| Establishes seatwork procedures for early finishers and students needing help. | ___ |
| Demonstrates withitness by monitoring seatwork students through eye scanning and provides corrections using nonverbal signals. | ___ |

# APPENDIX C
# RESEARCH QUESTIONS: UNDERLYING ASSUMPTIONS, SUPPORTING LITERATURE, AND INDICATORS

Research Question #1: What do *cooperating teachers* who participated in the *traditional* model of intern supervision cite as the *benefits* or advantages of having a university supervisor directly involved?

| *Assumption* | *Supporting Literature* | *Indicators* |
|---|---|---|
| 1. University supervisors contribute to the smooth operation of field-based experiences. | 1. Johnson, 1987. | 1. Are there ways in which the university supervisor helped keep the student teaching experience running smoothly? If so, tell me about specific instances. |
| 2. University supervisors provide direction for requirements, evaluation, and assessment of field-based experiences; functions requiring input from someone in a role outside the school setting. | 2. Zimpher, deVoss, & Nott, 1980. | 2a. How would you describe the university supervisor's role in providing direction for student teaching requirements, evaluation, and assessment?<br><br>2b. Did it make a difference that the person performing those functions was someone from outside the school setting? Why or why not? |
| 3. University supervisors enhance informational communication among participants of the student teaching triad. | 3. Zimpher, deVoss, & Nott, 1980. | 3. Can you think of any instances in which the university supervisor helped by communicating information?<br>If so, please describe. |

| | | |
|---|---|---|
| 4. University supervisors make critical contributions to student teachers' progress. | 4. Zimpher, deVoss, & Nott, 1980. | 4. In your experience this semester, did the university supervisor contribute to the student teacher's progress?<br>Tell me about specific instances. |

Research Question #2: What do *cooperating teachers* who participated in the *traditional* model of intern supervision cite as the *disadvantages* or drawbacks of having a university supervisor directly involved?

| *Assumption* | *Supporting Literature* | *Indicators* |
|---|---|---|
| 1. It is inherently difficult to maintain balance in interpersonal relationships within a triadic arrangement. | 1. Boydell, 1983; Diamonti, 1977; Emans, 1983; Hoover, O'Shea, & Carroll, 1988; Johnston & Hodge, 1981; McIntyre, 1983; McIntyre & Morris, 1980; Yee, 1968. | 1. Tell me what it was like for you to be part of a three-way interpersonal relationship; that is, a relationship between the student teacher, the university supervisor, and yourself as cooperating teacher. |
| 2. Effective university supervision is hampered by lack of well-defined performance standards and adequate personnel preparation. | 2. Hoover, O'Shea, & Carroll, 1988; Johnston & Hodge, 1981; Morris, 1974; O'Shea, 1987. | 2a. Based on your experience this semester, do you think university supervisors are adequately prepared for their job? Why or why not?<br><br>2b. Did you perceive clearly defined performance standards for university supervision?<br>Tell me about your impressions. |
| 3. Any discussion of student teachers' routines constitutes a potential criticism of the cooperating teacher' practices. | 3. Richardson-Koehler, 1988. | 3. During the post-observation conference, what was it like for you, as the cooperating teacher, to hear the university supervisor critique the student teacher's practices or performance? |

| | | |
|---|---|---|
| 4. University supervisors, lacking sufficient time to build a relationship, are not able to affect the feedback process by working with individual dyads. | 4. Richardson-Koehler, 1988. | 4. Did the type of relationship the university supervisor had with you and the student teacher provide an opportunity for useful or helpful feedback? Tell me about your experience. |
| 5. Observational data is seldom used as a basis for diagnosis and remediation of student teaching practices. | 5. Demchak & Browder, 1987; Warger & Aldinger, 1984. | 5a. During classroom visits, university supervisors usually make lots of notes, then conference with the student teacher and cooperating teacher, if possible. In your experience this semester, how were the observation notes and conference time used by the university supervisor?<br><br>5b. In your experience, did these visits by the university supervisor result in any changes in the student teacher's performance? Please describe your experience. |
| 6. University supervisors, caught between the demands of the university and the school setting, are unable to spend the time necessary to build a trusting relationship. | 6. Richardson-Koehler, 1988. | 6a. University supervisors must be responsive to both the university and the school setting. How did this dual responsibility affect the relationship developed between you, the student teacher, and the university supervisor?<br><br>6b. Was time a factor in developing a relationship? If so, in what way? |

Research Question #3: What do *cooperating teachers* who participated in the *alternative* model of intern supervision cite as the *benefits* or advantages of assuming primary responsibility for intern supervision, rather than having a university supervisor directly involved?

| *Assumption* | *Supporting Literature* | *Indicators* |
|---|---|---|
| 1. It is inherently difficult to maintain balance in interpersonal relationships within a triadic arrangement. | 1. Boydell, 1983; Diamonti, 1977; Emans, 1983; Hoover, O'Shea, & Carroll, 1988; Johnston & Hodge, 1981; McIntyre, 1983; McIntyre & Morris, 1980; Yee, 1968. | 1. Tell me about your interpersonal relationship with your student teacher. In what way(s) do you think the relationship would have been different if it had included a university supervisor? |
| 2. The influence of university supervisors on student teachers is uncertain. | 2. McIntyre, 1983; McIntyre & Morris, 1980; Metcalf, 1981; Yee, 1968, 1969. | 2. As you assumed primary responsibility for supervising your intern, what was it like not to have a university supervisor's influence on the student teaching experience? |

Research Question #4: What do *cooperating teachers* who participated in the *alternative* model of intern supervision cite as the *disadvantages* or drawbacks of assuming primary responsibility for intern supervision, rather than having a university supervisor directly involved?

| *Assumption* | *Supporting Literature* | *Indicators* |
|---|---|---|
| 1. Without direct involvement of a university supervisor, there may be lack of direction for requirements, evaluation, and assessment of field-based experiences; functions requiring input from someone in a role outside the school setting. | 1. Zimpher, deVoss, & Nott, 1980. | 1. University supervisors often provide direction for student teaching requirements, evaluation, and assessment. What was it like not having someone from outside the school setting to assume that role? |
| 2. The cooperating teacher's primary responsibility is to ensure pupil learning, not improved student teacher performance. | 2. Warger & Aldinger, 1984. | 2. A teacher's primary responsibility is to ensure pupil learning, not improved student teacher performance. Tell me how you balanced these two roles. Did conflicts arise? If so, describe the conflicts. Which conflicts were resolved, and how? Which conflicts lingered? |

Research Question #5: What do *interns* who received *traditional* supervision cite as the *benefits* or advantages of having a university supervisor directly involved?

| *Assumption* | *Supporting Literature* | *Indicators* |
|---|---|---|
| 1. University supervisors contribute to the smooth operation of field-based experiences. | 1. Johnson, 1987. | 1. Are there ways in which the university supervisor helped keep the student teaching experience running smoothly? If so, tell me about specific instances. |
| 2. University supervisors enhance informational communication among participants of the student teaching triad. | 2. Zimpher, deVoss, & Nott, 1980. | 2. Can you think of any instances in which your university supervisor helped by communicating information? If so, please describe. |
| 3. University supervisors provide guidance, feedback, and support to interns. | 3. Bennie, 1964; Zimpher, deVoss, & Nott, 1980; Johnson, 1987. | 3. What role did your university supervisor play in providing guidance, feedback, and support during your student teaching semester? |

| | | |
|---|---|---|
| 4. University supervisors provide direction for requirements, evaluation, and assessment of field-based experiences; functions requiring input from someone in a role outside the school setting. | 4. Zimpher, deVoss, & Nott, 1980 | 4a. How would you describe the university supervisor's role in providing direction for student teaching requirements, evaluation, and assessment?<br><br>4b. Did it make a difference that the person performing those functions was someone from outside the school setting? Why or why not? |
| 5. University supervisors make critical contributions to student teachers' progress. | 5. Zimpher, deVoss, & Nott, 1980. | 5. In your experience this semester, did the university supervisor contribute to your progress in student teaching?<br>If so, tell me about specific instances. |
| 6. Student teachers who receive direct university supervision perceive themselves to be performing better than student teachers who do not receive direct university supervision. | 6. Morris, 1974. | 6. Student teachers typically wonder how they are performing during their student teaching semester. Were there ways in which your university supervisor informed you about your student teaching performance? Please explain. |

Research Question #6: What do *interns* who received *traditional* supervision cite as the *disadvantages* or drawbacks of having a university supervisor directly involved?

| *Assumption* | *Supporting Literature* | *Indicators* |
|---|---|---|
| 1. It is inherently difficult to maintain balance in interpersonal relationships within a triadic arrangement. | 1. Boydell, 1983; Diamonti, 1977; Emans, 1983; Hoover, O'Shea, & Carroll, 1988; Johnston & Hodge, 1981; McIntyre, 1983; McIntyre & Morris, 1980; Yee, 1968. | 1. Tell me what it was like for you to be part of a three-way interpersonal relationship; that is, a relationship between the cooperating teacher, the university supervisor, and yourself as student teacher. |
| 2. Observational data is seldom used as a basis for diagnosis and remediation of student teaching practices. | 2. Demchak & Browder, 1987; Warger & Aldinger, 1984. | 2a. During classroom visits, university supervisors usually make lots of notes, then conference with the student teacher and cooperating teacher, if possible. In your experience this semester, how were the observation notes and conference time used by your university supervisor?<br><br>2b. In your experience, did these visits by the university supervisor result in any changes in your teaching practices? Please describe your experience. |

Research Question #7: What do *interns* whose cooperating teacher assumed primary responsibility for supervision cite as the *benefits* or advantages of *not having* a university supervisor directly involved?

| *Assumption* | *Supporting Literature* | *Indicators* |
|---|---|---|
| 1. It is inherently difficult to maintain balance in interpersonal relationships within a triadic arrangement. | 1. Boydell, 1983; Diamonti, 1977; Emans, 1983; Hoover, O'Shea, & Carroll, 1988; Johnston & Hodge, 1981; McIntyre, 1983; McIntyre & Morris, 1980; Yee, 1968. | 1. Tell me about your interpersonal relationship with your cooperating teacher. In what way(s) do you think the relationship would have been different if it had included a university supervisor? |
| 2. The influence of university supervisors on student teachers is uncertain. | 2. McIntyre, 1983; McIntyre & Morris, 1980; Metcalf, 1981; Yee, 1968, 1969. | 2. During your student teaching semester, your cooperating teacher assumed primary responsibility for supervision. What was it like not to have the influence of a university supervisor? |

Research Question #8: What do *interns* whose cooperating teacher assumed primary responsibility for supervision cite as the *disadvantages* or drawbacks of *not having* a university supervisor directly involved?

| *Assumption* | *Supporting Literature* | *Indicators* |
|---|---|---|
| 1. Without direct involvement of a university supervisor, there may be lack of direction for requirements, evaluation, and assessment of field-based experiences; functions requiring input from someone in a role outside the school setting. | 1. Zimpher, deVoss, & Nott, 1980. | 1. University supervisors often provide direction for student teaching requirements, evaluation, and assessment. What was it like not having someone from outside the school setting to assume that role? |
| 2. Cooperating teachers' lack of ability, or unwillingness, to reflect on classroom practices, either theirs or their student teacher's, contribute to overall poor quality of feedback provided to student teachers. | 2. Richardson-Koehler, 1988. | 2. How would you describe the quality of feedback about your teaching practices provided by the cooperating teacher? Can you think of times when the cooperating teacher reflected on his/her classroom practices? On your classroom practices? Please describe. |

| | | |
|---|---|---|
| 3. Student teachers without direct university supervision do not perceive themselves to be performing as well as student teachers with direct university supervision. | 3. Morris, 1974. | 3. Student teachers typically wonder how they are performing during their student teaching semester. What was it like not having a university supervisor's feedback on your student teaching performance? |
| 4. Student teachers are not exposed to a model of learning to teach that relies on rigorous analysis of teaching and collegiality. | 4. Richardson-Koehler, 1988. | 4a. Focusing on the student teaching semester as an opportunity to "learn to teach," can you recall instances when your cooperating teacher guided you through an analysis or had conversations with you about the process of learning to teach?<br>If so, tell me about it.<br><br>4b. Likewise, can you think of times when your cooperating teacher discussed with you the importance of collegiality in teaching and learning to teach? |

Research Question #9: What do *university supervisors* who participated in the *traditional* model of intern supervision consider to be the *strengths* of their role?

| *Assumption* | *Supporting Literature* | *Indicators* |
|---|---|---|
| 1. University supervisors contribute to the smooth operation of field-based experiences. | 1. Johnson, 1987. | 1. Are there ways in which you helped keep the student teaching experience running smoothly?<br>If so, tell me about specific instances. |
| 2. University supervisors provide direction for requirements, evaluation, and assessment of field-based experiences; functions requiring input from someone in a role outside the school setting. | 2. Zimpher, deVoss, & Nott, 1980. | 2a. How would you describe your role in providing direction for student teaching requirements, evaluation, and assessment?<br><br>2b. Do you think it made a difference that the person performing those functions was someone from outside the school setting? Why or why not? |
| 3. University supervisors enhance informational communication among participants of the student teaching triad. | 3. Zimpher, deVoss, & Nott, 1980. | 3. Can you think of any instances in which you helped by communicating information?<br>If so, please describe. |

| | | |
|---|---|---|
| 4. University supervisors make critical contributions to student teachers' progress. | 4. Zimpher, deVoss, & Nott, 1980. | 4. Do you think you contributed to the student teachers' progress this semester? Tell me about specific instances. |
| 5. Student teachers who receive direct university supervision perceive themselves to be performing better than student teachers who do not receive direct university supervision. | 5. Morris, 1974. | 5. Student teachers typically wonder how they are performing during their student teaching semester. Were there ways in which you informed your student teachers about their teaching performance? Please explain. |

Research Question #10: What do *university supervisors* who participated in the *traditional* model of intern supervision consider to be the *limitations* of their role?

| *Assumption* | *Supporting Literature* | *Indicators* |
|---|---|---|
| 1. It is inherently difficult to maintain balance in interpersonal relationships within a triadic arrangement. | 1. Boydell, 1983; Diamonti, 1977; Emans, 1983; Hoover, O'Shea, & Carroll, 1988; Johnston & Hodge, 1981; McIntyre, 1983; McIntyre & Morris, 1980; Yee, 1968. | 1. Tell me what it was like for you to be part of a three-way interpersonal relationship; that is, a relationship between the student teacher, the cooperating teacher, and yourself as the university supervisor. |
| 2. The purposes of student teaching may be undefined or ambiguous. | 2. O'Shea, 1987; Warger & Aldinger, 1984. | 2. In your experience, how clearly defined are the purposes of student teaching? |
| 3. Effective university supervision is hampered by lack of well-defined performance standards and adequate personnel preparation. | 3. Hoover, O'Shea, & Carroll, 1988; Johnston & Hodge, 1981; Morris, 1974; O'Shea, 1987. | 3a. Based on your experience this semester, do you think you were adequately prepared for university supervision? Why or why not?<br><br>3b. Did you perceive clearly defined performance standards for your job? Tell me about your impressions. |

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| 4. Because effective supervision is labor-intensive, university supervision can be adversely affected by time constraints on university faculty, who may experience underfunding, lack of administrative support and low status within the university community. | 4. Buck, Morsink, Griffin, Hines, & Lenk, 1992; Hoover, O'Shea, & Carroll, 1988; Johnston & Hodge, 1981; Morris, 1974; Warger & Aldinger, 1984; Yee, 1968. | 4. What is your perception of administrative support and funding for university supervision of student teachers? What about status within the university community? |
| 5. University supervisors, caught between the demands of the university and the school setting, are unable to spend the time necessary to build a trusting relationship. | 5. Richardson-Koehler, 1988. | 5a. University supervisors must be responsive to both the university and the school setting. How did this dual responsibility affect the relationship that developed between you, the cooperating teacher, and the student teacher?<br><br>5b. Was time a factor in developing a relationship? If so, in what way? |
| 6. University supervisors, lacking sufficient time to build a relationship, are not able to affect the feedback process by working with individual dyads. | 6. Richardson-Koehler, 1988. | 6. Did the type of relationship you had with the cooperating teacher and the student teacher provide an opportunity for useful or helpful feedback? Tell me about your experience. |
| 7. One semester is usually insufficient time to substantially improve student teachers' performance. | 7. Buck, Morsink, Griffin, Hines, & Lenk, 1992; Zimpher, deVoss, & Nott, 1980. | 7. In your experience, can a student teacher's performance be substantially improved in one semester? |

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| 8. The influence of university supervisors on student teachers is uncertain. | 8. McIntyre, 1983; McIntyre & Morris, 1980; Metcalf, 1981; Yee, 1968, 1969. | 8. Do you think student teachers are influenced by university supervisors? Explain. |
| 9. Student teachers are likely influenced by outside sources. | 9. Hoover, O'Shea, & Carroll, 1988; Zeichner, 1980; Hogben & Lawson, 1983; Zeichner & Tabachnick, 1981; Johnson, 1986; Karmos & Jacko, 1977; Seperson & Joyce, 1973. | 9. Do you think student teachers are influenced by outside sources (i.e., other than cooperating teachers and university supervisors)? If so, what are the sources, and how much influence do they exert? |
| 10. Student teachers often discount previous knowledge from university coursework. | 10. Richardson-Koehler, 1988. | 10. Do student teachers draw on their previous knowledge from university coursework and apply it to their student teaching practices? Tell me about your impressions. |
| 11. Student teachers are not exposed to a model of learning to teach that relies on rigorous analysis of teaching and collegiality. | 11. Richardson-Koehler, 1988. | 11. In your opinion, are student teachers exposed to models of learning to teach that rely on rigorous analysis of teaching? Likewise, are they exposed to a model of collegiality in teaching and learning to teach? |
| 12. Student teachers are generally compelled to work within classroom structures and routines already established by the cooperating teacher. | 12. Richardson-Koehler, 1988. | 12. Teacher educators require interns to assume full responsibility for all aspects of teaching during their internship; yet, interns are placed in classrooms where structures and routines are already established by the cooperating teacher. As a university supervisor, how did you address this dilemma? |

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| 13. Any discussion of student teachers' routines constitutes a potential criticism of the cooperating teachers' practices. | 13. Richardson-Koehler, 1988. | 13. During the post-observation conferences, what was it like for you, as the university supervisor, to critique the student teachers' practices or performance in the presence of their cooperating teacher? |
| 14. Having no formal status in the classroom, the university supervisor frequently defers to the cooperating teacher, whose primary responsibility is to ensure pupil learning, not improved student teacher performance. | 14. Warger & Aldinger, 1984. | 14a. How would you describe your status as university supervisor during classroom visits?<br><br>14b. Did you ever defer to the cooperating teacher? If so, what prompted you to defer?<br><br>14c. In your opinion, are cooperating teachers faced with a conflict between their primary responsibility to ensure pupil learning, on the one hand, and a responsibility to improve student teacher performance, on the other hand? Describe specific instances. |

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|---|---|---|
| 15. Observational data is seldom used as a basis for diagnosis and remediation of student teaching practices. | 15. Demchak & Browder, 1987; Warger & Aldinger, 1984. | 15a. During classroom visits, university supervisors usually make lots of notes, then conference with the student teacher and cooperating teacher, if possible. This semester, how did you use the observation notes and conference time?<br><br>15b. Do you think your observations and conferences resulted in any changes in the interns' teaching practices? Please describe your experiences. |

Research Question #11: What do *university supervisors* who participated in the *alternative* model of intern supervision consider to be the *strengths* of their role?

| *Assumption* | *Supporting Literature* | *Indicators* |
|---|---|---|
| 1. There is no difference in the performance of student teachers with and without university supervision; however, university supervisors serve as a university-school liaison and provide feedback about the student teaching program to the college of education. | 1. Morris, 1974 | 1a. In your role as university supervisor this semester, you were not responsible for direct supervision of student teachers in their classrooms, but you served many other important functions. Would you please describe how your role evolved, what functions you fulfilled, and comment on the importance of those functions.<br>1b. The need for an effective university-school liaison is often mentioned. Did that role evolve? Tell me about it.<br>1c. Colleges of education depend on feedback about their student teaching program, a function typically performed by university supervisors. Were you able to gather pertinent information and provide feedback to the university about the internship program this semester? How did that occur?<br>1d. Some research findings suggest that there is no difference in the teaching practices of student teachers who do and do not receive "traditional" university supervision, but that it is important to have someone serve as university-school liaison and to provide feedback to the teacher education program administrators. Given your experience this semester, how would you respond? |

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|---|---|---|
| 2. It is inherently difficult to maintain balance in interpersonal relationships within a triadic arrangement. | 2. Boydell, 1983; Diamonti, 1977; Emans, 1983; Hoover, O'Shea, & Carroll, 1988; Johnston & Hodge, 1981; McIntyre, 1983; McIntyre & Morris, 1980; Yee, 1968. | 2. Tell me about your interpersonal relationships with your student teachers. In what way(s) do you think the relationships would have been different had cooperating teachers been included? |

Research Question #12: What do *university supervisors* who participated in the *alternative* model of intern supervision consider to be the *limitations* of their role?

| *Assumption* | *Supporting Literature* | *Indicators* |
|---|---|---|
| 1. University supervisors contribute to the smooth operation of field-based experiences. | 1. Johnson, 1987. | 1. "Traditional" university supervisors are often given credit for keeping the student teaching experience running smoothly. Did that happen without your direct involvement in the classroom this semester?<br>If so, how? If not, what problems arose? |
| 2. University supervisors enhance informational communication among participants of the student teaching triad. | 2. Zimpher, deVoss, & Nott, 1980. | 2. Were you able to effectively communicate information without direct involvement in the classroom? If so, how. If not, what were the difficulties? |
| 3. Without direct involvement of a university supervisor, there may be lack of direction for requirements, evaluation, and assessment of field-based experiences; functions requiring input from someone in a role outside the school setting. | 3. Zimpher, deVoss, & Nott, 1980. | 3. University supervisors often provide direction for student teaching requirements, evaluation, and assessment. In your opinion, was there sufficient direction this semester? If so, how did that occur without your direct involvement in the classroom? If not, what happened? |

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| 4. University supervisors make critical contributions to student teachers' progress. | 4. Zimpher, deVoss, & Nott, 1980. | 4. Do you think you contributed to the student teachers' progress this semester? If so, how did that happen without direct involvement in the classroom? If not, why not? Describe your experiences. |
| 5. Cooperating teachers' lack of ability, or unwillingness, to reflect on classroom practices, either theirs or their student teacher's, contribute to overall poor quality of feedback provided to student teachers. | 5. Richardson-Koehler, 1988. | 5. How would you describe the quality of feedback provided to your student teachers by their cooperating teachers this semester? Please describe with specific examples. |
| 6. Student teachers who receive direct university supervision perceive themselves to be performing better than student teachers who do not receive direct university supervision. | 6. Morris, 1974. | 6. Student teachers typically worry about their teaching performance during their student teaching semester, relying on feedback from their university supervisor. Without your direct involvement in the classroom, how do you think your student teachers formed perceptions about their performance? In your opinion, were their perceptions generally accurate? Do you think student teachers' perceptions would have evolved differently if their university supervisor had been directly involved in the classroom? Explain, please. |

# APPENDIX D
# INTERVIEW PROTOCOLS

## COOPERATING TEACHER INTERVIEW
## TRADITIONAL MODEL OF SUPERVISION

**I'd like to know what you thought about university supervision of your student teacher this semester.**

**1. First, I'd like to know more about you as a cooperating teacher.**

**A.** In what areas are you certified to teach?

**B.** How many years have you been teaching, and in what areas?

**C.** Have you ever participated as a cooperating teacher before?
If so, how many semesters?
If not, what prompted you to do so this semester?

**D.** In the past, did your student teacher receive "traditional" university supervision (i.e., university supervisor makes approximately 4-6 classroom visits, observes, then conferences)?

If you have participated in an "alternative" model of university supervision, please describe.

**E.** What type of class are you now teaching (e.g., regular classroom, resource room, self-contained in regular school, self-contained in center school, etc.)?

**F.** Describe your students by:
Ages/grade level:
Categories of disabilities:

**G.** How many students do you teach?

**H.** Are there other adults in your classroom (e.g., paraprofessional, volunteer, pre-intern, intern, etc.)?
If so, are they part/full time?

**2. Next, I'm interested in knowing if you think there were benefits or advantages in having a university supervisor directly involved in the supervision of your intern this semester.**

**A.** Are there ways in which the university supervisor helped keep the student teaching experience running smoothly this semester? If so, tell me about specific instances.

**B.** How would you describe the university supervisor's role in providing direction for student teaching requirements, evaluation, and assessment? Did it make a difference that the person performing those functions was someone from outside the school setting? Why or why not?

**C.** Can you think of any instances in which the university supervisor helped by communicating information? If so, please describe.

**D.** In your experience this semester, did the university supervisor contribute to the student teacher's progress? Tell me about specific instances.

**3. Now, I'd like to find out if you think there were disadvantages or drawbacks in having a university supervisor directly involved in the supervision of your intern this semester.**

**A.** Tell me what it was like for you to be part of a three-way interpersonal relationship; that is, a relationship between the student teacher, the university supervisor, and yourself as cooperating teacher.

**B.** Based on your experience this semester, do you think university supervisors are adequately prepared for their job? Why or why not?
Did you perceive clearly-defined performance standards for university supervision? Tell me about your impressions.

**C.** During the post-observation conference, what was it like for you, as the cooperating teacher, to hear the university supervisor critique the student teacher's practices or performance?

**D.** During classroom visits, university supervisors usually make lots of notes, then conference with the student teacher and cooperating teacher, if possible.
In your experience this semester, how were the observation notes and conference time used by the university supervisor?
In your experience, did these visits by the university supervisor result in any changes in the student teacher's performance? Please describe your experience.

**E.** University supervisors must be responsive to both the university and the school setting. How did this dual responsibility affect the relationship developed between you, the student teacher, and the university supervisor?
Was time a factor in developing a relationship? If so, in what way?

**F.** Did the type of relationship the university supervisor had with you and the student teacher provide an opportunity for useful or helpful feedback? Tell me about your experience.

**4. Is there anything else you'd like to comment on about university supervision of your student teacher this semester?**

## COOPERATING TEACHER INTERVIEW
## ALTERNATIVE MODEL OF SUPERVISION

**I'd like to know what you thought about university supervision of your student teacher this semester.**

**1. First, I'd like to know more about you as a cooperating teacher.**

**A.** In what areas are you certified to teach?

**B.** How many years have you been teaching, and in what areas?

**C.** Have you ever participated as a cooperating teacher before?
If so, how many semesters?
If not, what prompted you to do so this semester?

**D.** In the past, did your student teacher receive "traditional" university supervision (i.e., university supervisor makes approximately 4-6 classroom visits, observes, then conferences)?

If you have participated in an "alternative" model of university supervision, please describe.

**E.** What type of class are you now teaching (e.g., regular classroom, resource room, self-contained in regular school, self-contained in center school, etc.)?

**F.** Describe your students by:
Ages/grade level:
Categories of disabilities:

**G.** How many students do you teach?

**H.** Are there other adults in your classroom (e.g., paraprofessional, volunteer, pre-intern, intern, etc.)?
If so, are they part/full time?

**2. Next, I'm interested in knowing if you think there were benefits or advantages in assuming primary responsibility for supervision of your intern, rather than having a university supervisor directly involved this semester.**

**A.** Tell me about your interpersonal relationship with your student teacher. In what say(s) do you think the relationship would have been different if it had included a university supervisor?

**B.** As you assumed primary responsibility for supervising your intern, what was it like not to have a university supervisor's influence on the student teaching experience?

**3. Now, I'd like to find out if you think there were disadvantages or drawbacks in assuming primary responsibility for supervision of your intern, rather than having a university supervisor directly involved this semester.**

**A.** University supervisors often provide direction for student teaching requirements, evaluation, and assessment. What was it like not having someone from outside the school setting to assume that role?

**B.** A teacher's primary responsibility is to ensure pupil learning, not improved student teacher performance. Tell me how you balanced these two roles. Did conflicts arise? If so, describe the conflicts. Which conflicts were resolved, and how? Which conflicts lingered?

**4. Is there anything else you'd like to comment on about assuming primary responsibility for supervision of your student teacher, rather than having a university supervisor directly involved this semester?**

## INTERN INTERVIEW
## TRADITIONAL MODEL OF SUPERVISION

**I'd like to know what you thought about university supervision during your internship this semester.**

**1. First, I'd like to know more about you as an intern.**

**A.** When you graduate, in what areas will you be certified to teach?

**B.** Describe the classroom in which you are interning:

Type (i.e., resource room, self-contained in regular school, self-contained in center school, etc.):

Exceptionality:

**C.** Describe the students in your classroom:

Ages/grade levels:

Category of disability:

Number of students:

**D.** Briefly describe your previous classroom experience.

**2. Next, I'm interested in knowing if you think there were benefits or advantages in having a university supervisor directly involved in your student teaching supervision this semester.**

**A.** Are there ways in which the university supervisor helped keep the student teaching experience running smoothly? If so, tell me about specific instances.

**B.** Can you think of any instances in which your university supervisor helped by communicating information? If so, please describe.

**C.** What role did your university supervisor play in providing guidance, feedback, and support during your student teaching semester?

**D.** How would you describe the university supervisor's role in providing direction for student teaching requirements, evaluation, and assessment?

Did it make a difference that the person performing those functions was someone from outside the school setting? Why or why not?

**E.** In your experience this semester, did the university supervisor contribute to your progress in student teaching? If so, tell me about specific instances.

**F.** Student teachers typically wonder how they are performing during their student teaching semester. Were there ways in which your university supervisor informed you about your student teaching performance? Please explain.

**3. Now, I'd like to find out if you think there were disadvantages or drawbacks in having a university supervisor directly involved in your student teaching supervision this semester.**

**A.** Tell me what it was like for you to be part of a three-way interpersonal relationship; that is, a relationship between the cooperating teacher, the university supervisor, and yourself as student teacher.

**B.** During classroom visits, university supervisors usually make lots of notes, then conference with the student teacher and cooperating teacher, if possible. In your experience this semester, how were the observation notes and conference time used by your university supervisor?

In your experience, did these visits by the university supervisor result in any changes in your teaching practices? Please describe your experience.

**4. Is there anything else you'd like to comment on about university supervision during your internship this semester?**

## INTERN INTERVIEW
## ALTERNATIVE MODEL OF SUPERVISION

**I'd like to know what you thought about university supervision during your internship this semester.**

**1. First, I'd like to know more about you as an intern.**

**A.** When you graduate, in what areas will you be certified to teach?

**B.** Describe the classroom in which you are interning:

Type (i.e., resource room, self-contained in regular school, self-contained in center school, etc.):

Exceptionality:

**C.** Describe the students in your classroom:

Ages/grade levels:

Category of disability:

Number of students:

**D.** Briefly describe your previous classroom experience.

**2. Next, I'm interested in knowing if you think there were benefits or advantages in *not* having a university supervisor directly involved in your student teaching supervision this semester.**

**A.** Tell me about your interpersonal relationship with your cooperating teacher. In what way(s) do you think the relationship would have been different if it had included a university supervisor?

**B.** During your student teaching semester, your cooperating teacher assumed primary responsibility for supervision. What was it like not to have the influence of a university supervisor?

**3. Now, I'd like to find out if you think there were disadvantages or drawbacks in *not* having a university supervisor directly involved in your student teaching supervision this semester.**

**A.** University supervisors often provide direction for student teaching requirements, evaluation, and assessment. What was it like not having someone from outside the school setting to assume that role?

**B.** How would you describe the quality of feedback about your teaching practices provided by the cooperating teacher? Can you think of times when the cooperating teacher reflected on his/her classroom practices? On your classroom practices? Please describe.

**C.** Student teachers typically wonder how they are performing during their student teaching semester. What was it like not having a university supervisor's feedback on your student teaching performance?

**D.** Focusing on the student teaching semester as an opportunity to "learn to teach," can you recall instances when your cooperating teacher guided you through an analysis or had conversations with you about the process of learning to teach? If so, tell me about it.

Likewise, can you think of times when your cooperating teacher discussed with you the importance of collegiality in teaching and learning to teach?

**4. Is there anything else you'd like to comment on about university supervision during your internship this semester?**

## UNIVERSITY SUPERVISOR INTERVIEW
## TRADITIONAL MODEL OF SUPERVISION

**I'd like to know what you thought about university supervision of your student teachers this semester.**

1. **First, I'd like to know more about you as a university supervisor.**

   **A.** Have you had previous experience in university supervision of student teachers?

   If so, (a) how many semesters, and (b) in what type of settings and classrooms?

   If not, what prompted you to participate as a university supervisor this semester?

   **B.** Have you had previous teaching experience?

   If so, (a) how many years, and (b) in what areas?

   **C.** In what areas are you certified to teach?

   **D.** Have you had any training or professional preparation in university supervision, other than learning through experience?

   If so, please describe.

   **E.** What degrees do you hold?

**F.** If you have had past experience as a university supervisor, did you participate in a "traditional" model (i.e., university supervisor makes approximately 4-6 classroom visits, observes, then conferences)?

If you have participated in an "alternative" model of university supervision, please describe.

**2. Next, I'm interested in knowing what you considered to be the strengths of your role this semester.**

**A.** Are there ways in which you helped keep the student teaching experience running smoothly? If so, tell me about specific instances.

**B.** How would you describe your role in providing direction for student teaching requirements, evaluation, and assessment?

Do you think it made a difference that the person performing those functions was someone from outside the school setting? Why or why not?

**C.** Can you think of any instances in which you helped by communicating information? If so, please describe.

**D.** Do you think you contributed to the student teachers' progress this semester? Tell me about specific instances.

**E.** Student teachers typically wonder how they are performing during their student teaching semester. Were there ways in which you informed your student teachers about their teaching performance? Please explain.

**3. Now, I'd like to find out what you considered to be the limitations of your role this semester.**

**A.** Tell me what it was like for you to be part of a three-way interpersonal relationship; that is, a relationship between the student teacher, the cooperating teacher, and yourself as the university supervisor.

**B.** In your experience, how clearly defined are the purposes of student teaching?

**C.** Based on your experience this semester, do you think you were adequately prepared for university supervision? Why or why not?

Did you perceive clearly-defined performance standards for your job? Tell me about your impressions.

**D.** What is your perception of administrative support and funding for university supervision of student teachers? What about status within the university community?

**E.** University supervisors must be responsive to both the university and the school setting. How did this dual responsibility affect the relationship that developed between you, the cooperating teacher, and the student teacher?

Was time a factor in developing a relationship? If so, in what way?

**F.** Did the type of relationship you had with the cooperating teacher and the student teacher provide an opportunity for useful or helpful feedback? Tell me about your experience.

**G.** In your experience, can a student teacher's performance be substantially improved in one semester?

**H.** Do you think student teachers are influenced by university supervisors? Explain.

**I.** Do you think student teachers are influenced by outside sources (i.e., other than cooperating teachers and university supervisors)? If so, what are the sources, and how much influence do they exert?

**J.** Do student teachers draw on their previous knowledge from university coursework and apply it to their student teaching practices? Tell me about your impressions.

**K.** Teacher educators require interns to assume full responsibility for all aspects of teaching during their internship; yet, interns are placed in classrooms where structures and routines are already established by the cooperating teacher. As a university supervisor, how did you address this dilemma?

**L.** In your opinion, are student teachers exposed to models of learning to teach that rely on rigorous analysis of teaching? Likewise, are they exposed to a model of collegiality in teaching and learning to teach?

**M.** How would you describe your status as university supervisor during classroom visits?

Did you ever defer to the cooperating teacher? If so, what prompted you to defer?

In your opinion, are cooperating teachers faced with a conflict between their primary responsibility to ensure pupil learning, on the one hand, and a responsibility to improve student teacher performance, on the other hand? Describe specific instances.

**N.** During the post-observation conferences, what was it like for you, as the university supervisor, to critique the student teachers' practices or performance in the presence of their cooperating teacher?

**O.** During classroom visits, university supervisors usually make lots of notes, then conference with the student teacher and cooperating teacher, if possible. This semester, how did you use the observation notes and conference time?

Do you think your observations and conferences resulted in any changes in the interns' teaching practices? Please describe your experiences.

**4. Is there anything else you'd like to comment on about university supervision of your student teachers this semester?**

## UNIVERSITY SUPERVISOR INTERVIEW
## ALTERNATIVE MODEL OF SUPERVISION

**I'd like to know what you thought about university supervision of your student teachers this semester.**

**1. First, I'd like to know more about you as a university supervisor.**

**A.** Have you had previous experience in university supervision of student teachers?

If so, (a) how many semesters, and (b) in what type of settings and classrooms?

If not, what prompted you to participate as a university supervisor this semester?

**B.** Have you had previous teaching experience?

If so, (a) how many years, and (b) in what areas?

**C.** In what areas are you certified to teach?

**D.** Have you had any training or professional preparation in university supervision, other than learning through experience?

If so, please describe.

**E.** What degrees do you hold?

**F.** If you have had past experience as a university supervisor, did you participate in a "traditional" model (i.e., university supervisor makes approximately 4-6 classroom visits, observes, then conferences)?

If you have participated in an "alternative" model of university supervision, please describe.

**2. Next, I'm interested in knowing what you considered to be the strengths of your role this semester.**

**A.** In your role as university supervisor this semester, you were not responsible for direct supervision of student teachers in their classrooms, but you served many other important functions. Would you please describe how your role evolved, what functions you fulfilled, and comment on the importance of those functions.

The need for an effective university-school liaison is often mentioned. Did that role evolve? Tell me about it.

Colleges of education depend on feedback about their student teaching program, a function typically performed by university supervisors. Were you able to gather pertinent information and provide feedback to the university about the internship program this semester? How did that occur?

Some research findings suggest that there is no difference in the teaching practices of student teachers who do and do not receive "traditional" university supervision, but that it is important to have someone serve as university-school liaison and to provide feedback to the teacher education program administrators. Given your experience this semester, how would you respond?

**B.** Tell me about your interpersonal relationships with your student teachers. In what way(s) do you think the relationships would have been different had cooperating teachers been included?

**3. Now, I'd like to find out what you considered to be the limitations of your role this semester.**

**A.** "Traditional" university supervisors are often given credit for keeping the student teaching experience running smoothly. Did that happen without your direct involvement in the classroom this semester? If so, how? If not, what problems arose?

**B.** Were you able to effectively communicate information without direct involvement in the classroom? If so, how. If not, what were the difficulties?

**C.** University supervisors often provide direction for student teaching requirements, evaluation, and assessment. In your opinion, was there sufficient direction this semester? If so, how did that occur without your direct involvement in the classroom? If not, what happened?

**D.** Do you think you contributed to the student teachers' progress this semester? If so, how did that happen without direct involvement in the classroom? If not, why not? Describe your experiences.

**E.** How would you describe the quality of feedback provided to your student teachers by their cooperating teachers this semester? Please describe with specific examples.

**F.** Student teachers typically worry about their teaching performance during their student teaching semester, relying on feedback from their university supervisor. Without your direct involvement in the classroom, how do you think your student teachers formed perceptions about their performance?

In your opinion, were their perceptions generally accurate?

Do you think student teachers' perceptions would have evolved differently if their university supervisor had been directly involved in the classroom? Explain, please.

**4. Is there anything else you'd like to comment on about university supervision of your student teachers this semester?**

# APPENDIX E
# DEMOGRAPHIC INFORMATION FORMS

*Name* _____

*School* _____

## COOPERATING TEACHER
## BACKGROUND INFORMATION

1. Please provide the following demographic information:

   • Ethnicity: ___ White, Non-Hispanic ___ Asian/Pacific Islander
   ___ Hispanic ___ Native American
   ___ African-American

   • Gender: ___ Male ___ Female

2. In what area(s) are you certified to teach?

3. (a) How many years have you been teaching, and (b) in what areas?

4. Have you ever participated as a cooperating teacher before? _____

(Y/N)

   • If not, what prompted you to do so this semester?

   • If yes. . .
   (a) How many semesters? _____

   (b) Did your intern receive "traditional" university supervision (i.e., the university supervisor makes approximately 4-6 classroom visits, observes, then conferences)? _____

(Y/N)

   (c) Have you ever participated in an "alternative" model of student teacher supervision? _____ If so, please describe. Use reverse side if needed
(Y/N)

5. What type of class are you now teaching (e.g., regular classroom, resource room, self-contained in regular school, self-contained in center school, etc.)?

*Name* _____

*School* _____

6. Describe your students (a) by ages/grade levels and (b) category of disability.

   (a)

   (b)

7. How many students do you teach? _____

8. Are there other adults in your classroom (e.g., paraprofessional, volunteer, pre-intern, intern, etc.)? _____
   (Y/N)

   • If so, please list by title. Are they full or part time?

*Name* _____

*School* _____

**INTERN**
**BACKGROUND INFORMATION**

1. Please provide the following demographic information:
   - Ethnicity: ___ White, Non-Hispanic ___ Asian/Pacific Islander ___ Hispanic ___ Native American ___ African-American
   - Gender: ___ Male ___ Female

2. When you graduate, in what areas will you be certified to teach?

3. Describe the classroom in which you are interning:

   (a) Type (i.e., resource room, self-contained in regular school, self- contained in center school, etc.):

   (b) Exceptionality:

4. Describe the students in your classroom:

   (a) Ages/grade levels:

   (b) Category of disability:

   (c) Number of students:

5. Briefly describe your previous classroom experience.

*Name* _____

**UNIVERSITY SUPERVISOR**
**BACKGROUND INFORMATION**

1. Please provide the following demographic information:
   - Ethnicity: ___ White, Non-Hispanic ___ Asian/Pacific Islander
     ___ Hispanic ___ Native American
     ___ African-American
   - Gender: ___ Male ___ Female

2. What is your present position? _____ faculty member _____ doctoral student

3. What degrees do you hold? Areas of specialization?

4. Do you have previous classroom teaching experience? _____
   (Y/N)
   - If so, (a) how many years, and (b) in what areas?

   (a)

   (b)

5. Do you have previous experience in university supervision of student teachers?
   - If not, what prompted you to participate as a university supervisor this semester?

   - If so, (a) how many semesters, and (b) in what type of settings and classrooms?

   (a)

   (b)

   (c) Did you participate in a "traditional" model (i.e., university supervisor makes approximately 4-6 classroom visits, observes, then conferences)? _____
   (Y/N)

6. Have you ever participated in an "alternative" model of student teacher supervision? _____
   (Y/N)
   - If so, please describe. Use reverse side as needed.

*Name* _____

7. Have you had any training or professional preparation in student teacher supervision, other than learning through experience? _____
(Y/N)

- If so, please describe. Use reverse side as needed.

# APPENDIX F
# INFORMED CONSENT

1. TITLE OF PROJECT: University Supervision of Student Teachers: A Comparison of Traditional and Alternative Models

2. PRINCIPAL INVESTIGATOR(S): Ann S. Dillon
Doctoral Candidate
Department of Special Education
G-315 Norman Hall
392-0701 ext. 286

3. SUPERVISOR: Vivian I. Correa and Cecil D. Mercer
G-315 Norman Hall
392-0701 ext. 300

4. DATES OF PROPOSED PROJECT: From 8-22-94 to 12-16-94

5. SOURCE OF FUNDING FOR THE PROJECT: Personal funds

6. SCIENTIFIC PURPOSE OF THE INVESTIGATION: To compare student teaching outcomes for interns who receive traditional university supervision with interns who receive alternative student teaching supervision during their semester of full-time student teaching.

7. DESCRIBE THE RESEARCH METHODOLOGY IN NON-TECHNICAL LANGUAGE:

*Subject selection/assignment.* Participation will be solicited from all special education interns, cooperating teachers, and university supervisors involved in the University of Florida special education internship program during Fall semester, 1994. Participants will be randomly assigned to one of two groups: traditional or alternative approach to student teacher supervision.

*Treatment groups.* In the traditional approach, university supervisors will be directly involved with interns and cooperating teachers in classroom practice, making four to six classroom visits to observe interns' teaching, providing written feedback, then conferencing with interns and cooperating teachers. Unresolved problems will be handled by university supervisors.

In the alternative approach, university supervisors will not be directly involved with interns and cooperating teachers in classroom practice. Cooperating teachers will assume responsibility for observing their intern's teaching, conferencing with the intern, and providing frequent written feedback to the intern and the department of special education about the intern's progress. As a measure of quality control and to assure continuity of the internship program across treatment groups, alternative supervisors will view at least two videotapes submitted by interns, accompanied by the intern's written self-critique and written feedback from the cooperating teacher. The first videotape will be reviewed early in the semester in order to monitor progress and to identify potential problems as early as possible. Unresolved problems requiring direct classroom involvement will be handled by the internship program coordinator.

For both groups, university supervisors will (a) meet with interns for seminars; (b) ensure that policies, procedures, and requirements are followed; (c) ensure that assignments are completed in a timely manner; and (d) offer support and consultation for interns on an individual basis as needed.

*Requirements.* Once at the beginning and again at the end of the semester, cooperating teachers will evaluate interns' teaching performance using rating scales identical to those used routinely during the semester. Rating scales will be returned to university supervisors, who will remove identifying information, provide an identification code, and pass the rating scales on to the investigator. Statistical analyses will be made to determine if there are any significant differences between treatment groups on student teaching performance. (Copies of Rating Scales for Student Teacher Performance are attached.)

At the end of the semester, selected teams (cooperating teacher, intern, university supervisor) will be asked to participate in an individual interview requiring about one hour. The purpose of the interview is to gain an in-depth understanding of the benefits and disadvantages associated with each model of student teacher supervision. Qualitative methodology will be used to analyze interview content. (Copies of interviews are attached.)

8. POTENTIAL BENEFITS AND ANTICIPATED RISK:

The findings of this study will be used by the Department of Special Education at the University of Florida to strengthen the internship program and to better accommodate the needs of cooperating teachers, interns, and university supervisors. There are no anticipated risks to participants in this study.

9. DESCRIBE HOW SUBJECTS WILL BE RECRUITED, THE NUMBER AND AGE OF THE SUBJECTS, AND PROPOSED COMPENSATION:

Cooperating teachers and interns will be recruited at the initial orientation session to be held during the first week of the semester, prior to beginning student teaching. University supervisors will be recruited during their initial orientation and training session prior to the beginning of the semester. Potential participants include 43 special education interns, 43 cooperating teachers, and approximately seven university supervisors. All are adults; age is anticipated to range from early 20's to late 50's. Participants will not receive any additional compensation for participation in this study.

10. DESCRIBE THE INFORMED CONSENT PROCESS. INCLUDE A COPY OF THE INFORMED CONSENT DOCUMENT (if applicable):

During both the cooperating teacher-intern orientation session and the university supervisor orientation and training session, informed consent will be presented orally, using the letter of informed consent as a script. Potential participants will then be given a copy of the letter to read. Questions and concerns will be addressed. Volunteers will be asked to sign, date, and return one copy, and to keep another copy for their reference. (Letter of Informed Consent is attached.)

G-315 Norman Hall
University of Florida
Gainesville, FL 32611
August 23, 1994

C. Michael Levy, Chair
University of Florida Institutional Review Board
114 Psychology Building

RE: Revision of informed consent form
Project #94.349
University supervision of student teachers:
A comparison of traditional and alternative models

Dear Dr. Levy,

I was pleased to learn of the approval of my project. Please find enclosed a revised copy of the informed consent form, adding the phrase, "Approved for use through August 9, 1995. Be assured that I fully understand the importance of obtaining written informed consent from each participant. Should I encounter any complications during implementation which affect my subjects, I will notify the Board.

Thank you for your attention to this project.

Sincerely,

Ann S. Dillon

August 22, 1994

Hello,

My name is Ann Dillon, and I'm a doctoral candidate in the Department of Special Education at the University of Florida. During fall semester, 1994, I will be studying two different approaches to providing university supervision for special education interns. There are two purposes to my study. First, I will determine if there is any difference in student teaching progress associated with different approaches to student teacher supervision. Second, I hope to identify benefits and advantages, as well as disadvantages and drawbacks associated with each approach to student teacher supervision. The findings of my study will be used by the Department of Special Education at the University of Florida, and perhaps by other departments or other universities, to strengthen the internship program and to better accommodate the needs of cooperating teachers, interns, and university supervisors.

In order to more fully understand student teaching experiences from your perspective, I'd like the participation of as many cooperating teachers, interns, and university supervisors as possible. Ideally, I'd like include all student teaching participants this semester. If you decide to participate, here's what to expect:

- Cooperating teachers, interns, and university supervisors will be randomly assigned to one of two groups: either the "traditional" or an "alternative" approach to supervision.
- "Traditional" supervision means that the university supervisor will make four to six classroom visits to observe the intern's teaching, provide written feedback, then conference with the intern and cooperating teacher. Unresolved problems will be handled by the university supervisor.
- "Alternative" supervision means that the university supervisor will not make classroom visits to observe, provide written feedback, and conference. Instead, the cooperating teacher will assume responsibility for evaluating the intern's progress and for providing written feedback to the intern and the department of special education on a regular basis. Unresolved problems will be handled by the internship program coordinator.
- For both groups, the university supervisors will: meet with interns (all together) for seminars; ensure that student teaching policies, procedures, and requirements are understood and met; ensure that internship assignments are completed in a timely manner; and offer support and consultation for interns on an individual basis as needed.

Participation in the study will require minimal time or additional work. Here's what will be involved for participants in both groups.

- Provide demographic information on a brief form.
- Once at the beginning and again at the end of the semester, cooperating teachers will evaluate interns' teaching performance using rating scales identical to those used routinely during the semester. Rating scales will be returned to university supervisors, who will remove identifying information, provide an identification code, and pass the rating scales on to the investigator.

- At the end of the semester, a few teams (cooperating teacher, intern, and university supervisor) will be asked to participate in individual interviews. The interview will require about one hour, and will provide an opportunity to discuss strengths and limitations of intern supervision provided during this semester.

To be certain that your best interest always comes first, and that no one is penalized for honest opinions, the following steps will be taken:

- If you are assigned to the alternative supervision group and encounter significant problems, you may at any time request to be dropped from the study and to be provided with traditional supervision. In no way will the request result in penalty or prejudice against any participant.
- All identifying information will be removed from rating scales and replaced with identification codes to enable tracking of responses. Initial and final rating scales for the study will not be used in any way for purposes of evaluation.
- In order to ensure that final grades and evaluations will not be influenced, interviews will not be conducted until after final evaluations are submitted. You will not have to answer any question you do not wish to answer.
- To protect the privacy of all participants, all data will remain anonymous.

If you have any further questions or concerns, do not hesitate to contact me. I can be reached at 392-0701, ext. 286. I look forward to your participation in this study, and appreciate your contributions to teacher education.

I have read and I understand the procedure described above. I agree to participate in the procedure and I have received a copy of this description.

_____
(Participant's signature)

_____
(Date)

_____
(Ann S. Dillon, Investigator)

Approved for use through August 9, 1995

# APPENDIX G
# QUALITATIVE ANALYSIS OF INTERVIEWS: DOMAINS AND THEMES

Qualitative Analysis of Interviews:
Domains and Themes

Administrative

- Communication
  - Importance of communication
  - Ways of staying in contact
  - Phone as important link
- Responsibilities
  - Ways of supporting and maintaining control
  - Administrative duties
  - Feedback and evaluation
  - Assignments and requirements
- Factors that Influence Outcomes
  - Personal resources that define
  - Givens
  - Professional resources that define
- Internship Program Considerations
  - Program organization
  - Differences between models
  - Problems and risks
  - Events that change internship

Personal Interactions

- Functions and Roles
- Perceptions
- Dealing with conflict
- Events that change relationships
- Personalities and Revealing language
- Stress and Comfort
- Things missed or lost

## THEMES IDENTIFIED BY INDEPENDENT READER

University supervisor helpful in deadlines, guidelines, university expectations.

Appreciation for third perspective (university supervisor).

Personality affects each triad.

Wish for more time with university supervisor.

Scheduling concerns when university supervisor involved.

Phone communication important.

University supervisor suggestions seen as valuable.

Added respect for university supervisor's connection to university.

University supervisor's observations disrupt class flow for most.

Cooperating teacher sometimes very busy, unable to spend much time.

Cooperating teachers need more support/training if doing alternative.

Supervisors (alternative) perceived loss of contact, isolation.

University supervisors' status not perceived by themselves as very high, but cooperating teachers and interns seem to view university supervisors' status as high.

**Interns--Alternative:**

No disruption of routine or of students.

Supervisors help with university deadlines.

Perspective of outside person.

Cooperating teacher is busy.

More natural observations.

Support of university supervisor when problems with cooperating teacher.

More confidence in university supervisor's opinion, feedback.

"Answers vs. explanations"

Scheduling problems with university supervisor involved.

**Interns--Traditional:**

University supervisor reminded about deadlines, guidelines, meetings.

Third perspective - fairness.

Personality

Time--more wished for.

Added excitement of university supervisor observation.

Scheduling concerns with university supervisor.

Phone communication.

Value of suggestions by university supervisor.

Added respect for university connection.

Disruption in classroom.

**Cooperating Teachers--Alternative:**

University supervisor unnecessary in class activities; artificial.

Helpful with procedures and due dates.

Need inservice for cooperating teachers.

Objectivity of univesity supervisor; third perspective.

More work with alternative.

"More power to abuse"

**Cooperating Teachers--Traditional:**

Helpful to have paperwork clarification at beginning of semester.

Also, university supervisor was good with university requirements.

Helpful when university supervisor sees same area of need.

Importance of university supervisor opinion; supervisor open to cooperating teacher.

Reduced pressure if no university supervisor; schedule conflicts disappear.

Need checklist of required experiences.

Tough when university supervisor didn't answer questions.

Mystical university guidelines.

Wished for more time from university supervisor.

**University Supervisors--Alternative:**

Helping student with assignment deadlines; provides support.

Outsider; removed from process.

Importance of seminars.

Loss of personal contact.

Use of phone.

Training for cooperating teachers; strength of cooperating teachers.

**University Supervisors--Traditional:**

Seminars

Assignments

Mediation; being from outside helps if cooperating teacher and intern struggle.

Phone important communication tool.

Use of words "milieu" and "billowing morass."

See their role as highly paper oriented.

Status not very high; accepted, not revered.

# THEMES

***ADMINISTRATIVE:***

Communication

Contact

Phone

Administrative support

Administrative duties

Feedback

Evaluation

Progress

Assignments

Seminars

Conferencing

Scheduling

Control

Responsibility

Expectations

Time

Respect

Helpfulness

Reflection

Fairness

Objectivity

Professionalism

Connection with university

Outsider

Status

Impact

In-Out of touch with classroom teaching

Pedagogy

Valued professional opinion

Preparation for role

Previous experience in role

Inservice/Training support

Differences – Alternative/Traditional models

Artificiality versus naturally occurring

Assignment of participants

Program organization

Phases of internship

Internship problems

Problem solving

Shift in roles during semester

Events that strengthen internship

Potential risks

***PERSONAL INTERACTIONS:***

Sharing

Liaison

Mediator

Facilitator

Buffer

Confidence

Maturity

Perceptions

Variability

Personalities

Validation

Vested interest

Stress-Comfort

Isolation

Things missed or lost

Asking for help

Personal conflict

Covering up conflict

Interpersonal relationships

Events that strengthen relationships

Revealing language

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## BIOGRAPHICAL SKETCH

Ann Smith Dillon grew up in Louisville, Kentucky, graduating from public schools. She attended Peabody College in Nashville, Tennessee, majoring in special education. After transferring to Transylvania University in Lexington, Kentucky, she graduated with a Bachelor of Science degree in education in 1972.

Ms. Dillon worked in remedial reading and taught elementary school in Durham, North Carolina. Over the years, she taught in inclusive classrooms on several grade levels.

In 1980, Ms. Dillon entered graduate school at the University of North Carolina at Chapel Hill. She graduated in 1982 with a Master of Science degree in speech-language-hearing sciences. She taught in classrooms for students of all ages with blindness-deafness and with multiple severe disabilities. She later taught in classrooms for students with hearing and language impairments.

Ms. Dillon completed her doctoral studies at the University of Florida in Gainesville, Florida. In December, 2000, Ms. Dillon graduated with a Doctor of Philosophy degree in special education.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Cynthia C. Griffin, Chair
Associate Professor of Special Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Vivian I. Correa
Professor of Special Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Mary Kay Dykes
Professor of Special Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Cecil D. Mercer
Distinguished Professor of Special Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

M. David Miller
Professor of Educational Psychology

This dissertation was submitted to the Graduate Faculty of the College of Education and the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

December 2000

Ben F. Nelms

Dean, College of Education

Dean, Graduate School

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